4-10-2014

# A Generational Perspective of Teachers' Perceptions of Principals' Leadership Practices

Greg A. Doss
*Kennesaw State University*

# A GENERATIONAL PERSPECTIVE OF TEACHERS' PERCEPTIONS OF PRINCIPALS' LEADERSHIP PRACTICES

by

Greg A. Doss

A Dissertation

Presented in Partial Fulfillment of the Requirements for the

Degree of

Doctor of Education

In

Leadership for Learning

Educational Leadership

In the

Bagwell College of Education

Kennesaw State University

Kennesaw, GA

May 2014

Kennesaw State University
Graduate College

# Final Submission of Thesis or Dissertation

Name Greg Allen Doss

Program Education Leadership for Learning

**Title:** A GENERATIONAL PERSPECTIVE OF TEACHERS' PERCEPTIONS OF PRINCIPALS' LEADERSHIP PRACTICES

**Release Options**

Check one of the following:

[X] Provide open and immediate access

[ ] Embargo access until ____/____/_____ (not more than 5 years)

For: [ ] Patent [ ] Confidentiality [ ] Other _____

[ ] Restrict access to KSU only until ____/____/_____ (not more than 2 years)

Attach documentation of restrictive pre-publication policy.

**Student Agreement**

I hereby certify that, if appropriate, I have obtained and submitted with my Thesis or Dissertation a written permission statement from the owner(s) of each third party copyrighted matter to be included in my thesis or dissertation, allowing distribution as specified above. I certify that the version I submitted is the same as that approved by my advisory committee.

Candidate Signature _____ Date 4-7-14

**Signatures**

Mary M. Chandler — Thesis/Dissertation Chair/Major Professor — Date 4-10-14

_____ — Program Director — Date 4/15/14

_____ — Department Chair — Date 4-10-14

_____ — Graduate Dean — Date 14-Apr-2014

## ACKNOWLEDGMENTS

This task would not have been accomplished without the assistance and sacrifice of my family: Lisa, my wife; Gage and Reagan, our children. It was their love and encouragement throughout my lifelong educational journey that gave me the physical and intellectual strength to reach for new heights. They are my heartbeat in life.

To Dr. Mary Chandler, my dissertation chair, thank you for your dedication, guidance, and patience throughout this process. To my incredibly talented dissertation committee, Dr. Bill Swan and Dr. T.C. Chan, thank you for your feedback critique, and encouragement in developing my skills as a scholar.

To Dr. Mike Dishman, you have my deepest appreciation and gratitude for you endless endeavors to ensure my completion in the leadership for learning graduate program.

## ABSTRACT

A GENERATIONAL PERSPECTIVE OF TEACHERS' PERCEPTIONS OF PRINCIPALS' LEADERSHIP PRACTICES

by

Greg A. Doss

Kennesaw State University, 2014

The purpose of this quantitative study was to investigate if generational differences exist among teachers' perceptions of the leadership practices of Boomer and Gen X principals. Leadership practices of principals have been studied for decades in education. This research study analyzed data of eight dimensions of leadership practices from the 75 item School Improvement Opinion Survey (2006). The critical literature suggests that generational differences do exist among Boomer, Gen X, and Millennial teachers and their perception of the leadership practices of Boomer and Gen X principals. This study found statistically significant differences in the mean scores among the three generations of teachers depending on the leadership dimension, and whether they were led by a Boomer or Gen X principal. The dimensions of principals' leadership practices analyzed included: assessment, curriculum, instruction, leadership, planning and organization, professional learning, school-family-community, and school culture. The pattern that emerged from the data analyses indicated in greater frequency (70 of the 75 items) that there were no statistically significant generational differences of perceptions among teachers of the leadership practices of Boomer principals. However the data analyses indicated statistically significant generational differences (5 of the 75 items)

in the leadership dimension of school-family-community and school culture. Statistically significant generational differences occurred in greater frequency among Boomer and Millennial teachers, followed by Boomer and Gen X teachers, and only one occurrence among Boomer and Gen X teachers. The pattern that emerged from the data analyses indicated a greater frequency (31 of the 75 items) were statistically significant generational differences of the perceptions among teachers of the leadership practices of Gen X principals. The data analyses indicted statistically significant generational differences were in the leadership dimensions of: assessment, curriculum, instruction, leadership, planning and organization, professional learning, and school culture. The statistically significant generational differences occurred greater frequently among Millennial and Gen X teachers (30 of the 75 items), followed by Millennial and Boomer teachers (7 of the 75 items), and one occurrence among Boomers and Gen X teachers. Principal leadership practices that are capable of addressing generational contingencies have the potential of increasing teacher effectiveness. To achieve this goal, principals will need to adjust their leadership practices to be conducive to collaboration, mutual respect, diversity, professional growth, innovation, and building relationships among the generations of teachers.

## TABLE OF CONTENTS

## LIST OF TABLES

## LIST OF FIGURES

**Figure** **Page**

# CHAPTER I: INTRODUCTION

Education in the 21st century is impacted by technology, politics, and the economy. Preparing students becomes a daunting task for educators including the teachers who deliver the content and the principals who work with the teachers, students, parents, and the community. The demands for continuous improvement in American public schools have increased over the decades.

At the center of school improvement are the principals whose efforts hold the greatest accountability for the success of their students. One essential component in maintaining effective schools is with strong principal leadership (Ginsberg & Thompson, 1992). In order to achieve this, principals need to be aware of their leadership practices to maximize their effectiveness.

Marzano, Waters, and McNulty (2005) noted in their research that the greatest impact on school success can be determined through the leadership practices of principals. Based on their meta-analysis of more than 69 studies– that included 2802 schools examining effective school leadership– they synthesized the six most popular theories on school leadership: transformational, transactional, total quality management, servant, situational, and instructional. Marzano et al. (2005) derived 21 leadership responsibilities that can increase principal's influence on school improvement.

The Interstate School Leaders Licensure Consortium created standards and responsibilities for school principals to ensure student success including creating a shared

vision, promoting a positive school culture, managing the facilities, building relationships, and behaving in a fair and ethical manner (Educational Leadership Policy Standards, 2008). There has been much attention and research on what leadership practices make an effective principal; however little attention has been given to studying effective ways to evaluate principal practices (Davis, Kearney, Sanders, Thomas, & Leon, 2011). Longnecker and Nykodym (1996), conducting a private sector study on evaluation systems, noted that employee evaluations can provide valuable information to the employer about the employee with feedback on improvement. However, they noted that employee evaluation systems remain complicated and controversial. These systems are further complicated in education with evaluating the effective practices of principals. As with any professional position, feedback and monitoring are one criterion for improvement of professional performance.

Performance evaluations of principals are valuable to the level that the instrument assesses their leadership practices, effectiveness, weaknesses, and improved leadership performance (Studebaker, 2000). An effective performance based system has the potential to provide principals with feedback on their own leadership practices (Maxwell, 2008). In 2006 the Georgia the Department of Education created an all-encompassing school improvement plan known as the School Keys (Georgia Department of Education, n.d.). The School Keys are the foundation for Georgia's comprehensive school improvement plan. One component of the School Keys is the 75 question School Improvement Opinion Survey (2006) that allows school districts to collect data on the effectiveness of a principal's leadership practices from feedback of the teachers, community, parents, and students (School Improvement Opinion Survey, 2006). This

study will explore the perceptions of principal's leadership practices by teachers from a generational perspective. Principals are searching for continual improvement of performance of individuals and groups as it is a reflection on their leadership practices.

The workforce demographics of teachers are changing. The demographics are shifting to a more diverse mix of workers (Dychtwald, Erickson, & Morison, 2006). According to the Bureau of Labor Statistics in 2011, the Boomer generation comprised 30% of the labor force while Gen X was 35%, and Millennials 34% of the labor force. Each generation is unique and has varying degrees of experiences and expectations. Leaders and managers are expected to understand the dynamics of the organization based on sex, ethnicity, special needs, goals, attitudes, morale, climate, and work experience. However, there has been limited emphasis placed on awareness of potential generational differences in teachers. This study uses a sociological construct of generations of teacher's– Boomers, Gen X, and Millennials– to identify potential perceptional differences of principal's leadership practices.

A generation is a group identity of title (i.e., Boomers, Gen X, and Millennials) and birth range both of which vary from author to author and researcher to researcher. Pendergast (2009) contended that there is no consensus on the start and end of any given generation. Generational names in most cases are derived from popular culture, historic events, a rapid shift in demographics, or simply from the turn of the calendar (Pew Research Center, 2010). For the purpose of this study the working generations' title and age boundaries that will be adopted are as follow: Baby Boomer (Boomers): 1945-1963; Generation X (Gen X):1964-1979; and Millennials: 1980-2000.

## Statement of the Problem

Arsenault's (2004) research sought to access generational differences and leadership practices. The study found how leadership characteristics were ranked by each of the generations- Boomers, Gen X, and Millennials. The study concluded that leaders should recognize the diversity of the generations as important parts of the diversity mix.

Sessa, Kabacoff, Deal, and Brown (2007) conducted research similar to Arsenault's study on how the generational cohorts perceived leadership practices. The first part of their study revealed that each generation's perceptions of leadership styles differ. The second part of the study found that leaders in different generational cohorts have different leadership styles. Zemke, Raines, and Filipczak (2000) stated that the issues with the workplace are as follow:

> There is a problem in the workplace- a problem derived not from downsizing, rightsizing, change, technology, foreign competition, pointy-haired bosses, bad breath, cubical envy, or greed. It is a problem of values, ambitions, views, mindsets, demographics, and generations in conflict. The workplace you and we inhabit today is awash with the conflicting voices and views of the most age- and value-diverse workforce this country has known since our great-great grandparents abandoned field and farm for factory and office. (p. 9)

There is limited research in education on the perceptions of teachers by generational type - Boomers, Gen X, and Millennials. Research suggests that there are some distinctions among the three generations and their perceptions of leadership practices. This study attempted to determine if generational teachers' - Boomers, Gen X, and Millennials – perceptions are differentiated between leadership practices of generational principals – Boomers and Gen X.

## Research Questions and Hypotheses

Two sets research questions and associated null and alternative hypotheses guided the research based on the generational groups of teachers' perception of their principal's– Boomer and Gen X– leadership practices.

1. Are there statistically significant differences among the means of the three generations of teachers' perceptions of the eight dimensions of principal practices on the School Improvement Opinion Survey for schools with a Boomer principal?

    $H1_o$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

    $H1_a$: There are statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

If $H1_o$ is rejected indicating that there is a statistically significant difference among the means for the three groups of teachers for a dimension, then the following additional research hypotheses will be answered for each of the items that comprise the statistically significant dimension:

$H1_{oi}$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

$H1_{ai}$: There is a statistically significant difference among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

2. Are there statistically significant differences among the means of the three generations of teachers' perceptions of the eight dimensions of principal practices on the School Improvement Opinion Survey for schools with a Gen X principal?

$H2_o$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

$H2_a$: There are statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

If $H2_o$ is rejected indicating that there is a statistically significant difference among the means for the three groups of teachers for a dimension, then the following additional research hypotheses will be answered for each of the items that comprise the statistically significant dimension:

$H1_{oi}$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

$H1_{ai}$: There is a statistically significant difference among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

The flow of this research guided by the two sets research questions and associated null and alternative hypotheses based on the generational groups of teachers' perception of their principal's–Boomer and Gen X– leadership practices are illustrated in Figure 1.

## Significance of the Study

The purpose of this study is to determine if there are any statistically significant differences in teachers' perception by generation – Boomers, Gen X, Millennials – of the principal's leadership practices by generation – Boomers and Gen X. Teachers represent a multigenerational workforce where the principal's understanding of their perception can effectively motivate an age-diverse workforce. Salopek (2006) described that by understanding each generation's perception a leader can adapt new competencies to incorporate the most effective for each generation in the same respect a leader would adjust for cultural differences.

This quantitative study will improve the understanding of principal's leadership practices and how they are perceived by the generational teachers. The investigation of principal practices as perceived by the differing generations of teachers will add to the knowledge and skills for the professional development of educational leaders and offer opportunities for leaders to develop strategies to improve the effectiveness of leadership of multigenerational employees.

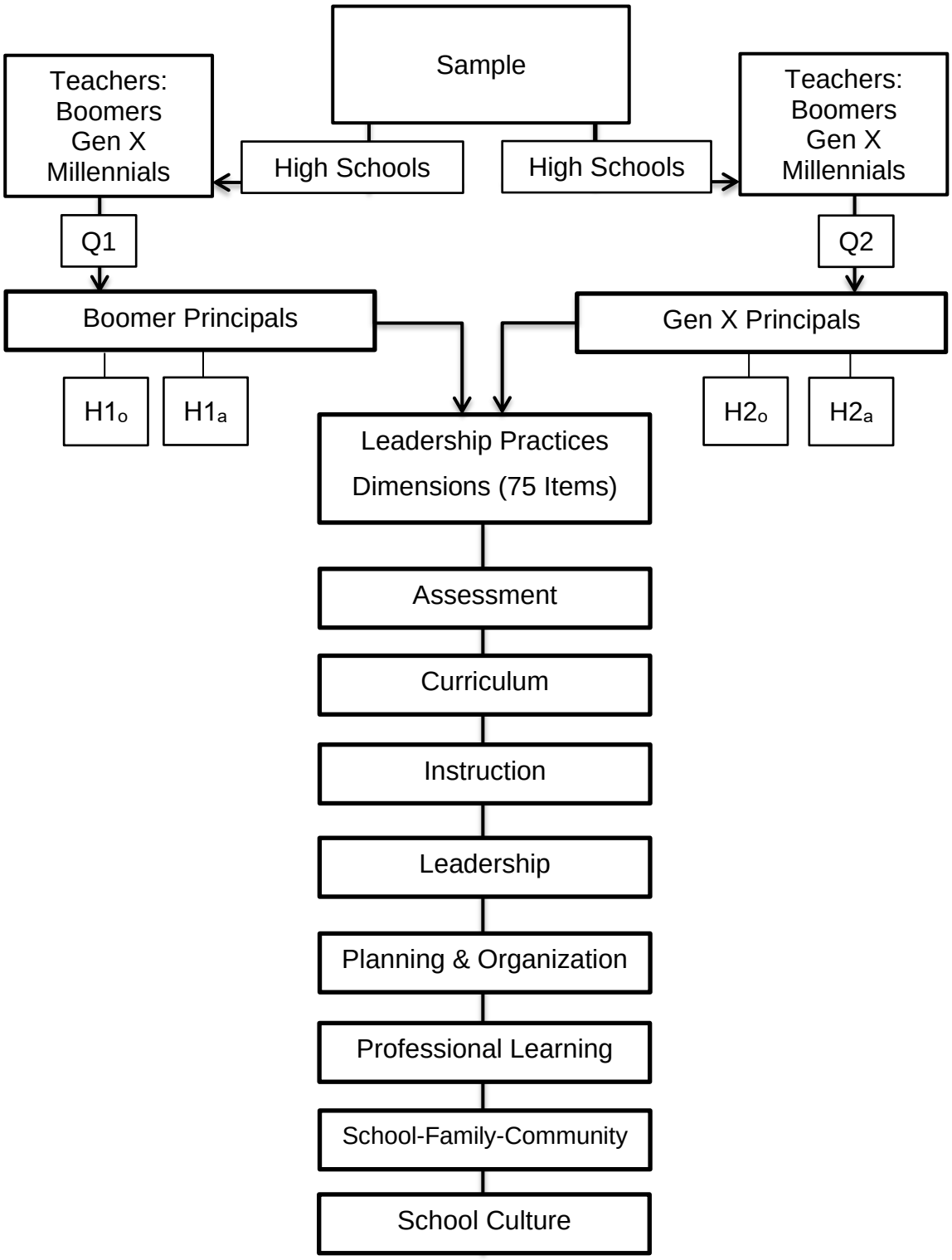


Figure 1*: Research Flow Chart of Teachers' Perceptions of Boomer and Gen X Principals' Leadership Practices.*

## Conceptual Framework

Schlesinger (1986) noted that a generation is not an exact unit; it is almost a metaphor. Early research often defined generations by genealogy or lineage. Mannheim (1952) postulated that members of a generation experience specific historical or cultural events that influence their outlook and perception of society. He did not specifically categorize any generation only referring to them as social phenomenon. This social phenomenon is now known as generational theory. Ryder (1965) defined a generational cohort as being more than a span of similar birth years. Rather, it is a group of individuals that have experienced the same historical and societal events in the same period of time. Individuals do not choose or may not be aware of their generational affiliation. With the ebb and flow of each generation, young and old, social change is driven by historical events that shape society in which Ryder (1965) describes as "demographic metabolism" (p. 843). Each generation will have a different perspective on the events that unfold around them. It is these shared experiences at key developmental stages that create the norms and unique characteristics that define and differentiate each generation (Kowske, Rasch, & Wiley, 2009). Rosow (1978) identified five components of a social cohort as:

- Consisting of people who share given life experiences.
- Their experiences are socially or historically structured.
- These experiences occur in a common generational framework.
- Experimental effects distinguish one generation from another.
- These effects are relatively stable over a group's lifetime (p. 67).

Each individual has a generational location whether it is on the early, late, or in the middle. The shared historical, social, and economic events shape a generation in

particular ways that influence their collective thinking (Pendergast, 2009). The Pew Research Center recognized in a 2010 study that generational analysis has a place in social science. They also recognized that scholars search for the unique and distinctive characteristics of any given age group. The unique and distinctive differences among the generations of Boomers, Gen X, and the Millennials are prevalent in their perceptions of the organizational culture and leadership practices (Table 1).

## Review of Relevant Terms

This research study used the following key terms:

- Boomers: Are people born between 1945 and 1963 (Zemke et al., 2000).
- Gen X: Are people born between 1964 and 1979 (Zemke et al., 2000).
- Millennials: Are people born between 1980 and 2000 (Zemke et al., 2000).
- Generation: A group sharing birth years, significant life events, and experiences at critical developmental stages (Kupperschmidt, 2000).
- Leadership practices: Activities of a leader tied to the organization to influence the motivation, knowledge, and the effectiveness of the members of the organization (Spillane, 2006).
- Transformational leadership: Where the leader and followers collaborate in ways that change or transform the organization (Spillane, 2006).

## Organization of Study

In Chapter 1 an introduction to the study was presented. It also included the need for the study, the purpose of the study, the research questions, and a review of relevant terms. Chapter 2 presents the theoretical framework and a review of literature of generational research regarding issues in the workplace, generational issues in education,

Table 1

*Generational Differences*

| Dimension | Generation | Perceptions |
|---|---|---|
| Authority | Boomers | Uncomfortable interacting |
| | Gen X | Not impressed |
| | Millennials | Respect must be earned |
| Admiration of Authority | Boomers | Take charge |
| | Gen X | Create an enterprise |
| | Millennials | Follow a hero |
| Preferred Leadership | Boomers | Visionary |
| | Gen X | Credible |
| | Millennials | Dependable |
| Level of Trust towards Authority | Boomers | None |
| | Gen X | Low |
| | Millennials | High |
| Work Ethics | Boomers | Workaholic |
| | Gen X | Work only as hard as needed |
| | Millennials | Team oriented |
| Rewards | Boomers | Position; title; corner office |
| | Gen X | Freedom not to do work |
| | Millennials | Meaningful work |
| Evaluations and Feedback | Boomers | Annually with documentation |
| | Gen X | Continuous |
| | Millennials | Immediate and frequently |

Source: Adapted from Pew Research center (2010), Reeves (2006), Tolbize (2008), and Holleran II (2008).

and generational leader's practices. The methodology for this study is described in Chapter 3, including the research design, instrumentation, data collection, and data analsyis. Chapter 4 presents the data and data analysis relevant to this study. Finally, a summary and discussion of the findings, limitations, conclusions and recommendations are contained in Chapter 5.

# CHAPTER II: REVIEW OF LITERATURE

## Introduction

Major challenges exist for educational leaders with increased accountability from the public and the workforce. Principals are faced with the external pressures of policies and the community to increase student achievement, as well as the internal expectations of organizational performance from a multigenerational teacher workforce. With the new challenges leadership must adapt and construct new models to address the challenges in today's and tomorrow's education system (Rost, 1991).

The purpose of this quantitative study was to examine the generational differences of organizational culture and leadership practices. A review of current and relevant literature was conducted. This chapter is sectioned by theoretical framework, review of literature, and summary.

## Theoretical Framework

The theoretical framework for this study is transformational leadership which encourages organizational members to participate, contribute, and involve the members in the decision-making process. In transformational theory the leader creates an empowering environment where the individual fulfills her or his needs as a productive member of the organization (Guthrie & Schuermann, 2010). There are four generational cohorts currently working in business and in education which are Traditionalists, Boomers, Gen X, and Millennials. However, Traditionalists in 2013 comprise less than 2% of the workforce according to the United States Census Bureau. Based on their small

cohort size they were excluded from this study. Each generation perceives the approach to leadership practices in education and business differently, a challenge that cannot be ignored (Ebenkamp, 1999).

The work characteristics of the three generations play a role in establishing the culture of an organization, which can be challenging for leaders. Each generation's collective thinking is shaped by how they were reared based on socio-economic conditions, political climate, and culture (Piper, 2008). The effects of these events tend to be constant across a generation and create a unique personality for each generation (Smola & Sutton, 2002). Cennamo and Gardner (2008) noted that different generations have different work values since each generation entered the workforce at different times. The individuals from different generations will have varying expectations and perceptions of leadership and preferences as to how they need to be led (McNeese-Smith & Crook, 2003).

In transformational practice the leader articulates the differences within an organization by focusing on higher-order intrinsic needs such as trust, support, and celebrations of accomplishments (Guthrie & Schuermann, 2010). Burns (2010) defined the most effective transformational leadership as a situation in which the leader and follower aspire to raise each other to the highest level of morality and innovation. Transformational leader practice encourages both parties to build a relationship of trust.

Transformational leaders inspire followers with a positive and hopeful outlook, minimizing the barriers that may exist within an organization. The most challenging aspect of transformational leaders is influencing followers to set aside their personal interests for the health and sustainability of the organization. This can depend on the

leader's inspirational qualities such as charisma, motivation, intellectual stimulation, and relationships.

## Review of Critical Literature

The themes of this literature review include the roles and responsibilities of leadership and organizational culture and how Boomers, Gen X, and Millennials receive them. Also, with the limited research of generational differences in public education the related research provides a critical analysis of businesses in the public and private sector. The themes include transformational leadership, leadership practices, organizational cultures, and generational cohorts.

### Transformational Leadership

Sergiovanni's (2007) perspective on the principal's transformational role as a leadership practice is it should meet the needs of all stakeholders both intrinsically and extrinsically. This practice of shared leadership involves teachers and administrators becoming active participants in the decision-making process to develop effective instructional practices and effective curriculum. Sergiovanni indicated that transformational leaders empower the organization to take ownership through a collaborative process. The transformational leaders are concerned more with the process of how to increase performance in the organization, rather than merely the end result. This allows teacher's to focus on the organizational purpose. It creates an organizational culture where the members are committed to a shared vision providing the opportunity to identify the best path for the organization to reach its goals. This type of collaborative approach builds a strong organizational culture among teachers.

**Leadership Practices**

Kirby, Paradise, and King's (1992) mixed methods research on transformational leadership in education studied how leaders were perceived as exhibiting transformational or transactional behaviors. The quantitative portion of the research utilized the Bass' Multifactor Leadership Questionnaire (Kirby, Paradise, & King, 1992). The questionnaire measured the effectiveness of education leaders in terms of organizational culture and employee satisfaction with their leader. The participants, over 100 educators, were surveyed on transformational and transactional leadership. The results of the study indicated that participants found greater satisfaction with transformational leadership. The qualitative portion of the research requested that the participants write a descriptive narrative on extraordinary leadership which yielded 58 responses. The narratives indicated that leaders were modeling the way with implementation of policies and procedures, challenging behaviors through decision-making and risk-taking in handling business, and influencing followers to increase performance by seeking feedback and providing leadership opportunities with high expectations.

Empirical leadership research (Hater & Bass, 1988; Howell & Avolio, 1993; Koh, Steers, & Terborg, 1995) found when leaders utilized a transformational leadership style it had a positive effect on organizational performance. Hater and Bass (1988) noted that their research revealed that leaders with a transformational leadership style were consistently rated as top performers more than leaders with other leadership styles. The research conducted by Howell and Avolio (1993) concluded that transformational leadership directly impacted and predicted organizational performance.

Powell (2003) examined the differences of how Boomers, Gen X, and Millennials perceived effective leadership. Powell modified the Kouzes and Posner (2002) framework to a survey format. The most prominent leadership characteristics between the cohorts were dependability, honesty, fair-mindedness, and ambition. Dependability is defined as when a leader can be relied upon to perform do his or her duties by creating policies and building trust within the organization. A leader's honesty is evident in organizational cultures that feature a high standard of ethics and mutual trust. Fair-mindedness is characteristic of leaders who support their followers with unbiased respect. Ambitious leaders show remarkable persistence, clarity of purpose, and optimism in the organization. The results indicated Boomers viewed dependability, honesty, and fair-mindedness as the most important leadership characteristics. Gen X rated dependability, honesty, and fair-mindedness as the most important characteristic. Millennials rated ambition of the leader as the most important characteristic.

Welsh (2010) conducted a mixed-method case study that researched the multigenerational success of Gagliardi – a coach with a track record of winning football games that stretched over six decades. Welsh's (2010) intent was to examine and identify the potential leadership styles, characteristics, and leadership effectiveness of this coach using standard qualitative research methods, interviewing, and using the Revised Leadership Scale for Sport survey (Chelladurai & Saleh, 1980). In the multigenerational research study, the results indicated four leadership themes were utilized by the coaches which were efficacy, effective communication, professional disposition, and empowerment. Participants across the generations had similar experiences as a whole noting it was the coach's unique ability to connect the dots to solve problems with his

team. Welsh (2010) noted that the one leadership trait that changed over the years was how the coach communicated to the players due to generational differences. Boomers wanted the respect of the coach where Gen X sought support for learning new skills and the Millennials desired visibility from the coach. Another finding was the expectation on feedback – Boomers required little feedback while Gen X and Millennials not only needed it, they demanded it.

Workplace coaching was a study conducted by Chernoff (2007) where leadership theory suggested that an organizational culture will increase employee satisfaction. The qualitative study was divided into manager interviews, focus group interviews, and human resources recommended interviews. The case study revealed that an organizational coaching program is effective in changing the work environment. All participants noted that the needs of the employees were secondary to organizational success; however, by introducing a coaching culture as part of a transformational leadership strategy leaders could connect with their employees. With this strategy the employees would feel supported with the increased visibility of the leader. Chernoff (2007) concluded that even though the coaching program was effective with managers it would have sustainability issues with a coaching team within the organization.

In a more recent research study, Michaud (2012) examined the generational differences of leadership practices of the Society for Public Health Education. The researcher utilized Kouzes and Posner (2012) Leadership Practices Inventory to measure generational differences in leadership practices of the Boomers, Gen X, and Millennials. While Michaud determined that a sample size of 268 participants were needed only 51 responses were returned. Even though the study found generational differences in the

perception of leadership practices, the researcher could not draw any conclusions due to the small sample size.

In 2006 Ranstad commissioned Harris Interactive to explore the workplace attitudes of leaders and organizational members. The goal of Ranstad's research program was to offer leaders insight into organizational issues that help leaders to develop strategies to deal with professional challenges. The results indicated that employees want recognition for their work, support through professional growth, new opportunities, and increased compensation.

The study revealed that while 73% of leaders supported and fostered professional development, only 49% of employees believed leadership provided development. This is a matter of perspective in which employees' ranked professional development by pay increases, learning new skills, and opportunities to serve in leadership roles. Leaders ranked development by learning new skills, increased responsibility, and leadership training. Each generation has preferences in professional development. Gen X and Millennials are most interested in a career path that will lead to opportunities in leadership; Boomers are interested in pay increases.

Based on the results of the survey on the effect of leadership practices on organizational culture, employees of all generations believed that leadership is engaging in these practices. These practices had a positive impact on the organizational culture including celebrating and rewarding accomplishments, encouraging an atmosphere of trust, respecting and seeking employee input through open communication, and leading by example.

**Organizational Culture**

Wallace (2006) studied the generational differences in the attitudes to work commitment. The purpose of the study was to see if there was a significant difference between generations in work commitment or the factors that are related to work commitment. Wallace's priority was to empirically document the work attitudes and experiences of Boomers and Gen X among a professional group of lawyers. The expectation was that Gen X will begin to fill the open positions of the retiring Boomers. However, Gen X is a smaller cohort than the Boomers and it is assumed that Gen X is more concerned about the quality of life with a work-life balance.

The participants in the Wallace research were individuals from independent law firms, corporations, and federal positions. The variables used in this study were work commitment, work effort, work flexibility, income, and rewards. The control variables included sex, marital and parental status, expectations met, work environment, and years of experience. Wallace concluded that Boomer's work commitment was based on their ability to have input into the decision-making process, and Gen X sought more visibility and support from their colleagues and leaders.

In another study Davis, Pawlowski, and Houston (2006) examined the differences in work commitment between Boomers and Gen X. Their participants were in the information technology field employed by state agencies and the university system. The research examined work involvement, work group attachment, and organizational and professional commitment. Consistent with Wallace's (2006) study, the difference between Boomers and Gen X is that Gen X needed support from other workers in the organization.

Bolton (2010) studied the needs of employees by generation. The research instrument was a survey questionnaire constructed and validated by the Pew Research Center (2006). The purpose of this quantitative descriptive study was to close the gap between organizational management strategies and employee needs. Bolton's (2010) research focused on job security and job satisfaction among the generations. The impact of career motivation and career decision on a generation was the basis of the research questions. The results of the study revealed that each generation had different perspectives on job satisfaction and career pursuits. The Boomers were committed to work seeking acknowledgement for leadership for their accomplishments. Gen X and the Millennials wanted the opportunity for career development into leadership roles.

Another study by Cennamo and Gardner (2008) focused on work values, job satisfaction, effective organizational commitment, and intent to look for new work of the Boomers, Gen X, and Millennials. There were 504 participants from various industries who completed the questionnaire where 23% were identified as Boomers, 57% as Gen X, 17% as Millennials, and 3% as Traditionalists. The results indicated that the Millennials value respect and trust in the work place more than the other generational cohorts. Job satisfaction among all generational cohorts and organizational commitment declined when turnover of workers increased. This study was based on self-reported data which limits the reliability and validity of the findings. The revealing factor of this study was the similarity in perspective of the generations on the relationship between job security and job satisfaction.

Perez (2005) examined how leadership behaviors affect worker's job satisfaction as it relates to pay, promotion opportunities, and tolerance with supervision. He discussed

how reward behavior from leaders is a common practice among the different generations in the workplace. The 242 participants were surveyed from the science and engineering industry based on their generational identification of Traditionalist, Boomer, Gen X, or Millennials. The results indicated that, no matter the generation, employees were influenced by rewarding their accomplishments and the opportunity for professional growth that related to higher job satisfaction.

Fernandez's (2009) research examined the differences between Gen X and Millennials as it related to work engagement, teamwork, and professional development. The study included 290 participants from a technology company located in the Silicon Valley. The results indicated there was a significant difference in a higher sense of work engagement in career development and work engagement between the Millennials and Gen X. Fernandez (2009) surmised that the reason there was no significant difference between Gen X and Millennials on teamwork and professional development was that when their needs are met, they remain engaged at work.

In 2005 Chan conducted a quantitative correlational research study that examined the relationship between leadership behavior and job satisfaction of Gen X and Millennials. The results indicated that the Millennials had higher expectations of their immediate supervisor's leadership behavior for stimulation and motivation by visibility within the organization. The findings also indicated that Millennials had a lower job satisfaction (more willing to change jobs) than Gen X. Chan (2005) concluded that there were significant differences between the perceptions of leadership behaviors in how leaders are implementing policies and routines and strengthening relationships that maximize the organization's performance.

A more recent study by Jones (2010) was based on a quantitative comparative analysis of corporate loyalty between the generations of Traditionalists, Boomers, Gen X, and Millennials in the manufacturing industry. The literature review revealed there were four elements of corporate loyalty consisting of compensation, benefits, job security, and managerial effectiveness. The survey instrument was created by the researcher that incorporated a five point Likert scale to quantify the participant's responses. The results indicated that differences in corporate loyalty existed between the four generations. While Traditionalists and Boomers had the high level of loyalty based on trust and respect, Gen X and Millennials had the lowest. Jones (2010) concluded that leadership needs to understand the strengths and weaknesses of each generation.

The main focus of the research conducted by Koenigsknecht (2002) studied the changing workforce between the Boomers and Gen X. The focus of the research was on the motivation and trust of employees. The elements of motivation include engaging work, pay, and self-worth in the workplace. The element of trust is based on the communication of the leaders and the working environment. Koenigsknecht (2002) concluded that organizational effectiveness is directly affected by trust. Further, the work environment influences organization, employee perceptions, and corporate culture.

Summers (2011) conducted a theoretical analysis of Millennials army officers' preference of leadership style. The study included a complete analysis of Millennials' characteristics and workplace values. The review of literature provides a critical analysis of Millennial characteristics by examining the transformational and transactional leadership theories. Summers (2011) concluded that Millennials are drawn to a transformational leadership style when leadership seeks their input on decisions.

Arsenault's (2004) research sought to extend and validate previous research on generational differences and the perception of leadership. The sample size consisted of 790 participants. The qualitative portion of the research revealed that each generation has a unique set of shared memories through events, entertainment, and favorite leaders. Significant differences were found between the generations related to honesty, care, and ambition. The Traditionalists and Boomers regarded honesty and caring from their leaders statistically significantly higher than Gen X and Millennials. On the other hand, Gen X and Millennials regarded ambition for operational management of the business significantly higher than Traditionalists and Boomers. Arsenault (2004) concluded that generational differences were a legitimate diversity issue, and leaders need to develop a unique style that translates into a mind-set of how people lead and want to be led.

Suckert's (2008) study compared the values of principals by generational cohort in the Minnesota school system that included Traditionalists, Boomers, Gen X, and Millennials. The researcher compared the values based on generational cohort, administrative level, and sex. Of the 738 participants, 1% were Traditionalists, 56% were Boomers, 43% were Gen X, and there were no Millennials. The descriptive data indicated that the principals' average age was 44 with an average of 11 years of administrative experience and approximately four job changes. The findings were that there was no significant difference between the generations indicating that values and responsibility were regarded the same within the organization.

Lancaster and Stillman (2005) created a company in 1997 called Bridge Works whose mission was to bridge the generation gap by understanding the unique perspectives of each generation. They began by conducting small-scale surveys to understand how

companies were recruiting, retaining, and managing their workforce. By 2001 the Bridge Works survey was conducted on a large-scale online format that included over 400 participants from various industries across the United States. The intent of the survey was to quantify the generational differences of beliefs and behaviors in the workplace. They found that 65% of the participants agreed that generational gaps hindered work productivity; 30% of Boomers and 60% of Gen X indicated their generation was viewed negatively; Millennals noted that safety in the workplace was their primary concern; 33% stated that they were offended by someone from another generation; Boomers' reason for remaining on the job was to make a difference where Gen X was autonomy; all generations chose Gen X for having the best work-life balance; over half of the participants stated that there were issues of fairness in regards to compensation and benefits.

Burke (2004), a survey analyst for the Society for Human Resource Management (SHRM), conducted a survey on generational differences in the workplace. The online survey created by SHRM explored the frequency and severity of intergenerational conflicts among the Boomers, Gen X, and Millennials. Over 2000 requests were sent out to SHRM employees. Responses were received from 258 participants. The results indicated that the most common areas of conflict involved work ethics, organizational hierarchy, and change. Burke concluded that training leaders on collaborative decision-making and stating clear policies and expectations for their organizations will resolve intergenerational conflicts. The survey analyst also noted that generational differences were minor stemming from organizational expectations of policies and procedures such as work hours and acceptable dress.

Ranstad (2008) commissioned Harris Interactive to take an in-depth look at how employers were cultivating the organizational culture and building relationships with their employees. This report indicated that gaps exist in employees' perception of what is important in their ideal leader's practices as opposed to their current leader's practices. The gap in leadership practices as perceived by each generation idealistic verses current practices (Table 2). The perception from Boomers is that they are micromanaged by leaders. Gen X complained their ideas are generally ignored by leaders. Millennials noted that they are not respected by their leaders. The study concluded that leaders can manage generational differences and increase intergenerational productivity through a collaborative teamwork culture with a fusion of knowledge, experience, and communication.

**Generational Cohort**

The terminology of a "generation" or a "cohort" is a group that has similar span of birth years, age location, and shared life events at critical developmental stages (Kupperschmidt, 2000). Crumpacker and Crumpacker (2007) distinguished the start of a new generation by birth rates increasing and remaining steady until the birth rates begin to decline marking the end of a generation. In the 20$^{th}$ century American society has attempted to label these generations to identify those cohorts that share distinct set of beliefs and attitudes growing up during a particular period in history (Strauss & Howe, 1991).

The cohorts relevant to this study are the Boomers, Gen X, and Millennials. Values differ among the three generations with unique perspectives on ethics, work, and

Table 2

*Perceived Leadership Practices*

| Practice | Generation | Idealistic (%) | Current (%) |
|---|---|---|---|
| Seeks input from employees | Boomers | 72 | 30 |
| | Gen X | 67 | 27 |
| | Millennials | 54 | 26 |
| Leadership support | Boomers | 69 | 25 |
| | Gen X | 65 | 26 |
| | Millennials | 59 | 26 |
| Respect from Leadership | Boomers | 56 | 34 |
| | Gen X | 46 | 27 |
| | Millennials | 38 | 30 |
| Leader seeks input | Boomers | 60 | 25 |
| | Gen X | 52 | 28 |
| | Millennials | 45 | 20 |
| Promotes professional growth | Boomers | 58 | 28 |
| | Gen X | 55 | 28 |
| | Millennials | 51 | 32 |
| Decision-making | Boomers | 56 | 34 |
| | Gen X | 49 | 29 |
| | Millennials | 38 | 30 |
| Open and visible | Boomers | 41 | 18 |
| | Gen X | 41 | 17 |
| | Millennials | 34 | 16 |
| Leadership opportunities | Boomers | 57 | 20 |
| | Gen X | 50 | 22 |
| | Millennials | 47 | 21 |
| Policies and procedures | Boomers | 51 | 24 |
| | Gen X | 50 | 24 |
| | Millennials | 42 | 19 |
| Handling business | Boomers | 64 | 28 |
| | Gen X | 54 | 26 |
| | Millennials | 51 | 26 |

management (Zemke et al., 2000). Based on these unique perspectives, conflicts can arise (Strauss & Howe, 1991). The employee relationships in an organization can become toxic if the conflicts arise between the generations. The focal points of an organization that can be affected by worker values and attitudes are promotions, rewards, and sustainability (Crumpacker & Crumpacker, 2007).

**Boomers**

Sociologists have defined the Boomers, as those born between 1946 and 1964 (Zemke et al., 2000). This generational cohort was the largest generation in U.S. history. Approximately 77 million people were born between 1946 and 1965 which represents approximately 29% of the United States population (United States Census Bureau, n.d.). The values for the Boomers were dedication to work ethic and worth ethic in their careers (Zemke et al., 2000). Being subjected to large classrooms, large families, and the individuals competing for athletic positions, the Boomers became extremely competitive in their work lives. This generational cohort learned to work harder and spend more hours at work and became conditioned to being rewarded for their extra efforts (Culp, 2011). Hence, the word "workaholic" was coined to describe this generation's work habits. From their perspective, it was a philosophy of live to work. Boomers did not see much in life beyond work.

Boomers believe when they enter the workforce they would stay with a company until retirement. During their work life monetary rewards were more important that free time. They shared the values of their parents in that they were loyal to their companies and placed high respect for title and rank. Boomers believed that the dedication to hard work and sacrifice is a reasonable price to pay for success. This was a generation that

believed in job security. The Boomers saw job security as a company where one could stay for a long time, work up the ladder, and become vested with tenure (Lancaster & Stillman, 2005).

**Gen X**

Gen X is the generation with a birth span from 1964 to 1980 and is a relatively small generational cohort (United States Census Bureau, n.d.). Part of the reason for this small cohort was that mothers of Gen X delayed childbirth in pursuit of a career (Crumpacker & Crumpacker, 2007). Babies and children were left alone at home or sent off to daycare creating a parent-free childhood which made Gen X feel neglected and attention deprived.

The members of this generation believe they have little job security and a lower sense of company loyalty. Gen X has a desire for a work-life balance; they are driven by their accomplishments not by a time clock (Joiner, 2000). Gen X are strongly individually motivated by personal benefits (Culp, 2011). With a smaller family unit, and spending much of their time alone, Gen X is not motivated by working with other people.

Gen X is noted as being extremely adaptable to change and prefers a flexible schedule, and they tend to be more process-oriented than result-oriented (Zemke et al., 2000). Whereas the Boomers worked harder, Gen X was apt to work smarter. Smarter often times meant marketing themselves for a new career as companies reacted to downturns in the economy by downsizing, rightsizing, and layoffs. Companies began to discontinue retirement plans for new workers, and healthcare costs were passed on to the worker. The result was a generation where company loyalty did not matter; they were on

their own to secure their future for retirement. Gen X learned that in the workplace there was no guarantee of survival (Zemke et al., 2000).

**Millennials**

Strauss and Howe (1991) adopted the identification Millennials to describe the generation with birth years from 1981 to 2000. Millennials, approximately 78 million, are the largest generational cohort since the Boomers according to the U.S. Census Bureau. Parents and teachers taught this generation to set goals and aim high (Papp, 2007). As a whole this is the most educated generation. However, with the rising cost of education, parents are investing a considerable amount in this generation's education; any grade below an A is unacceptable (Elmore, 2010). No longer is the A for achieving, it is for attempting.

For the Millennials competition is deemed unhealthy. They were nurtured and coddled by their parents taking care of them each step of the way (Culp, 2011). Their childhood was very structured with multiple sports activities, recitals, and enrichment programs. The Millennials have been identified as the most techno savvy generation. Their technical skills grew at an earlier age than any other generations. Millennials are connected 24/7 to each other through social networks, cell phones, and the internet. According to Shaw (2009) an educational shift has occurred for this generation from a behaviorist paradigm of direct instruction, memorization, and textbooks to a more constructivist paradigm that is collaborative, global, and interactive.

In the workplace Millennials tend to be goal-oriented and expect results instantaneously. This generation has little or no experience with failure and high expectations to the speed of their climb up the corporate ladder (Elmore, 2010). Co-

workers complain about the lack of independence of the Millennials who worry about making a mistake or the fear of failure (Lancaster & Stillman, 2005).

## Summary

Today's workforce environment in education is changing rapidly where leaders need to consider the multigenerational profile inside their schools to prepare for and manage the challenges ahead. Bridging the gap of a multigenerational organization will lead to improved employee satisfaction. Zemke et al. (2000) contended that an organization can be a positive, productive, and satisfying place for employees if leadership is willing to model the way.

Themes presented in Chapter II support and justify the need for additional research of generational differences within organizational cultures that are affected by leadership practices in education. While research exists on generational differences in businesses in the public and private sector, a gap of research exists on generational differences in public education. The research indicates that differences exist between the generations which can lead to conflict and loss of organizational effectiveness. By understanding the interactions of each generation, organizational culture, and leadership practices further research can continue to identify and clarify the factors that increase organizational performance.

The current study will add to the current gap in research by creating a foundation for the three generations in education such that future research will have a more complete picture of organizational culture and leadership practices in a multigenerational workforce. The review of literature validated the diversity issue within an organization that stems from generational differences. Each generation has a unique mindset with

different preferences, beliefs, and attitudes toward the organization and the leader. These differences determine how a person from a generation leads or how he or she wants to be led. The generational cohort in an organization should be recognized by their leader as integral parts of the diversity mix just as are sex, religion, and race. The objective for leaders is to become sensitive to these generational differences and transform them into strengths. Zemke et al. (2000) suggested that listening and questioning skills need to be developed by leaders that target potential conflicts before they happen.

In previous generational studies as indicated in Chapter II various survey instruments have been utilized by researchers. One survey instrument used by researchers was the Kouzes and Posner Leadership Practices Inventory (Kouzes & Posner, 2002). Others chose an instrument created by the Pew Research Center or from Bridge Works, and a few researchers chose to create their own survey instruments. For the purposes of this study these survey instruments were considered by the researcher; however, were rejected as they were tailored to business and industry, not education. The instrument utilized for this study was the School Improvement Opinion Survey (Georgia Department of Education, n.d.).

# CHAPTER III: METHODOLOGY

The purpose of this quantitative descriptive research was to assess the perceptions of high school teachers from three generational perspectives on their principal's leadership practices. The generation cohorts– Boomers, Gen X, and Millennials– are from 13 high schools in a Georgia metro-county school district. The research utilized the 2013 data from the 75 question School Improvement Opinion Survey that the school adopted from the Georgia Department of Education. The district has distributed the survey annually since it's' adoption to all employees in each school to rank the effectiveness of the principal's performance in eight dimensions: assessment, curriculum, instruction, leadership, planning and organization, professional learning, school–family–community, and school culture. This chapter details the procedures for conducting this study and presents the research questions and hypotheses, research design, sample, the 75 principal practices variables, measurement instruments, including reliability and validity estimates, procedures for data collection and analysis, limitations, and ethical considerations.

## Research Questions and Hypothesis

Two sets research questions and associated null and alternative hypotheses guided the research based on the generational groups of teachers' perception of their principal's– Boomer and Gen X– leadership practices.

1. Are there statistically significant differences among the means of the three generations of teachers' perceptions of the eight dimensions of principal practices on the School Improvement Opinion Survey for schools with a Boomer principal?

    $H1_o$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

    $H1_a$: There are statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

If $H1_o$ is rejected indicating that there is a statistically significant difference among the means for the three groups of teachers for a dimension, then the following additional research hypotheses will be answered for each of the items that comprise the statistically significant dimension:

$H1_{oi}$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

$H1_{ai}$: There is a statistically significant difference among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

2. Are there statistically significant differences among the means of the three generations of teachers' perceptions of the eight dimensions of principal practices on the School Improvement Opinion Survey for schools with a Gen X principal?

    $H2_o$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

    $H2_a$: There are statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

If $H2_o$ is rejected indicating that there is a statistically significant difference among the means for the three groups of teachers for a dimension, then the following additional research hypotheses will be answered for each of the items that comprise the statistically significant dimension:

$H1_{oi}$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

$H1_{ai}$: There is a statistically significant difference among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

## Research Design

This study examined three existing generational groups of teachers for each group of principal. The analysis consisted of examining the means of perceptions among the three groups of teachers for each group of principal. For the purposes of this study one pre-existing group of teachers– Boomers, Gen X, and Millennials– are led by Boomer principals; the other group of teachers– Boomers, Gen X, and Millennials– are led by Gen X principals. There were no Millennial principals in this study because these individuals have not yet achieved sufficient experience to hold a position of a high school principal.

Creswell (2008) indicated that utilizing a survey design provides a quantitative description of teacher's perceptions of leadership practices. A descriptive design allows researchers to summarize data, analyze the characteristics of a selected sample, and present a statistically accurate representation of the phenomenon (Leedy & Ormrod, 2001). This study attempted to determine if generational differences exist among teachers on their perceptions of Boomer and Gen X principals' leadership practices.

## Sample

The sample from one the largest school districts in the state of Georgia consisted of 16 high schools. Of these, 13 principals (81%) elected to allow their schools to participate. These 13 schools comprised the sample for this study. Of the 13 high schools, five were identified to be led by Boomer principals, and eight high schools were led by Gen X principals. The teachers identified in this study were: (a) employed by the participating school district, (b) aged between 50 and 70 placed in the Boomers cohort, (c) aged between 35 and 49 placed in the Gen X cohort, and (d) aged between 22 and 34

placed in the Millennial cohort. The principals identified in this study were: (a) employed by the participating school district, (b) aged between 50 and 70 placed in the Boomers cohort, and (c) aged between 35 and 49 placed in the Gen X cohort. Tables 3 to 8 provide teacher demographics, teacher generation, and student demographics for each of five schools for Boomer principals (HSB1-HSB5), for each of the eight schools for Gen X principals (HSX1-HSX8). Even though student demographics are not a part of the study, it could be an indicator of teacher's perception or a generational school preference.

The sample size of the 13 high schools was 1615 teachers with 642 teachers being led by Boomer principals and 973 teachers being led by Gen X principals. The racial/ethnic composition of the teachers under the Boomer principals were 99 Black, 503 White, 25 Hispanic, 5 Asian, and 10 Multi-racial. The racial/ethnic composition of teacher under Gen X principals were 119 Black, 794 White, 42 Hispanic, 15 Asian, and 11 Multi-racial.

The generational composition of teachers in the 13 high schools were 483 Boomers, 691 Gen X, and 441 Millennials. The five high schools led by Boomer principals the generational composition of teachers consisted of 175 Boomers, 283 Gen X, and 184 Millennial. The eight high schools led by Gen X principals the generational composition of teachers consisted of 304 Boomers, 411 Gen X, and 258 Millennials. Figure 2 illustrates flow of the sample for this research guided by the two sets research questions and associated null and alternative hypotheses based on the generational groups of teachers' perception of their principal's–Boomer and Gen X– leadership practices.

Table 3

*Boomer Principal School– Teacher Demographics*

| Racial/Ethnic Composition | HSB1 | HSB2 | HSB3 | HSB4 | HSB5 | Total |
|---|---|---|---|---|---|---|
| Black | 1 | 53 | 17 | 20 | 2 | 94 |
| White | 139 | 55 | 101 | 103 | 104 | 502 |
| Hispanic | 3 | 7 | 8 | 5 | 4 | 27 |
| Asian | 1 | 2 | 1 | 4 | - | 8 |
| Other | - | 2 | 4 | 3 | 2 | 11 |
| Total | 145 | 119 | 131 | 135 | 112 | 642 |
| School Met AYP | Yes | No | Yes | No | Yes | |

Table 4

*Gen X Principal School– Teacher Demographics*

| Racial/Ethnic Composition | HSX1 | HSX2 | HSX3 | HSX4 | HSX5 | HSX6 | HSX7 | HSX8 | Total |
|---|---|---|---|---|---|---|---|---|---|
| Black | 7 | 41 | 13 | 4 | 34 | 7 | 2 | 10 | 118 |
| White | 107 | 73 | 121 | 92 | 100 | 104 | 96 | 92 | 785 |
| Hispanic | 5 | 8 | 7 | 1 | 9 | 3 | 4 | 5 | 42 |
| Asian | 2 | 3 | 3 | 1 | 5 | - | 1 | 1 | 16 |
| Other | 2 | 1 | 3 | 1 | 2 | 1 | 1 | 1 | 12 |
| Total | 123 | 126 | 147 | 99 | 150 | 115 | 104 | 109 | 973 |
| School Met AYP | Yes | No | Yes | Yes | No | Yes | Yes | Yes | |

Table 5

*Boomer Principal School– Teacher Generation*

| Sample | HSB1 | HSB2 | HSB3 | HSB4 | HSB5 | Total |
|---|---|---|---|---|---|---|
| Boomers | 49 | 21 | 48 | 30 | 27 | 175 |
| Gen X | 64 | 48 | 53 | 59 | 59 | 283 |
| Millennials | 32 | 50 | 30 | 46 | 26 | 184 |
| Total | 145 | 119 | 131 | 135 | 112 | 642 |

Table 6

*Gen X Principal School– Teacher Generation*

| Sample | HSX1 | HSX2 | HSX3 | HSX4 | HSX5 | HSX6 | HSX7 | HSX8 | Total |
|---|---|---|---|---|---|---|---|---|---|
| Boomers | 50 | 36 | 44 | 24 | 41 | 36 | 38 | 35 | 304 |
| Gen X | 46 | 48 | 66 | 40 | 65 | 56 | 40 | 50 | 411 |
| Millennials | 27 | 42 | 37 | 35 | 44 | 23 | 26 | 24 | 258 |
| Total | 123 | 126 | 147 | 99 | 150 | 115 | 104 | 109 | 973 |

Table 7

*Boomer Principal School– Student Demographics*

| Racial/Ethnic Composition | HSB1 | HSB2 | HSB3 | HSB4 | HSB5 | Total |
|---|---|---|---|---|---|---|
| Black | 162 | 1388 | 857 | 1481 | 191 | 4079 |
| White | 1953 | 210 | 690 | 471 | 1786 | 5110 |
| Hispanic | 80 | 463 | 292 | 224 | 85 | 1144 |
| Asian | 401 | 21 | 209 | 22 | 43 | 696 |
| Other | 80 | 21 | 42 | 45 | 21 | 209 |
| Total | 2676 | 2103 | 2090 | 2243 | 2126 | 11,238 |
| SWD | 214 | 210 | 146 | 269 | 170 | 1009 |
| FRL | 134 | 1514 | 961 | 1211 | 149 | 3969 |

Note: SWD = student with disabilities; FRL = free and reduced lunch

Table 8

*Gen X Principal School– Student Demographics*

| Racial/Ethnic Composition | HSX1 | HSX2 | HSX3 | HSX4 | HSX5 | HSX6 | HSX7 | HSX8 | Total |
|---|---|---|---|---|---|---|---|---|---|
| Black | 223 | 681 | 874 | 325 | 1203 | 465 | 127 | 508 | 4406 |
| White | 1558 | 122 | 1183 | 1111 | 370 | 1173 | 1459 | 888 | 7864 |
| Hispanic | 101 | 855 | 334 | 171 | 579 | 243 | 73 | 236 | 2592 |
| Asian | 81 | 35 | 104 | 68 | 93 | 101 | 109 | 145 | 736 |
| Other | 61 | 52 | 76 | 34 | 69 | 40 | 46 | 36 | 414 |
| Total | 2024 | 1745 | 2571 | 1709 | 2314 | 2022 | 1814 | 1813 | 16,012 |
| SWD | 182 | 279 | 231 | 188 | 255 | 182 | 218 | 218 | 1753 |
| FRL | 283 | 1466 | 1028 | 512 | 1458 | 566 | 163 | 671 | 6147 |

Note: SWD = student with disabilities; FRL = free and reduced lunch

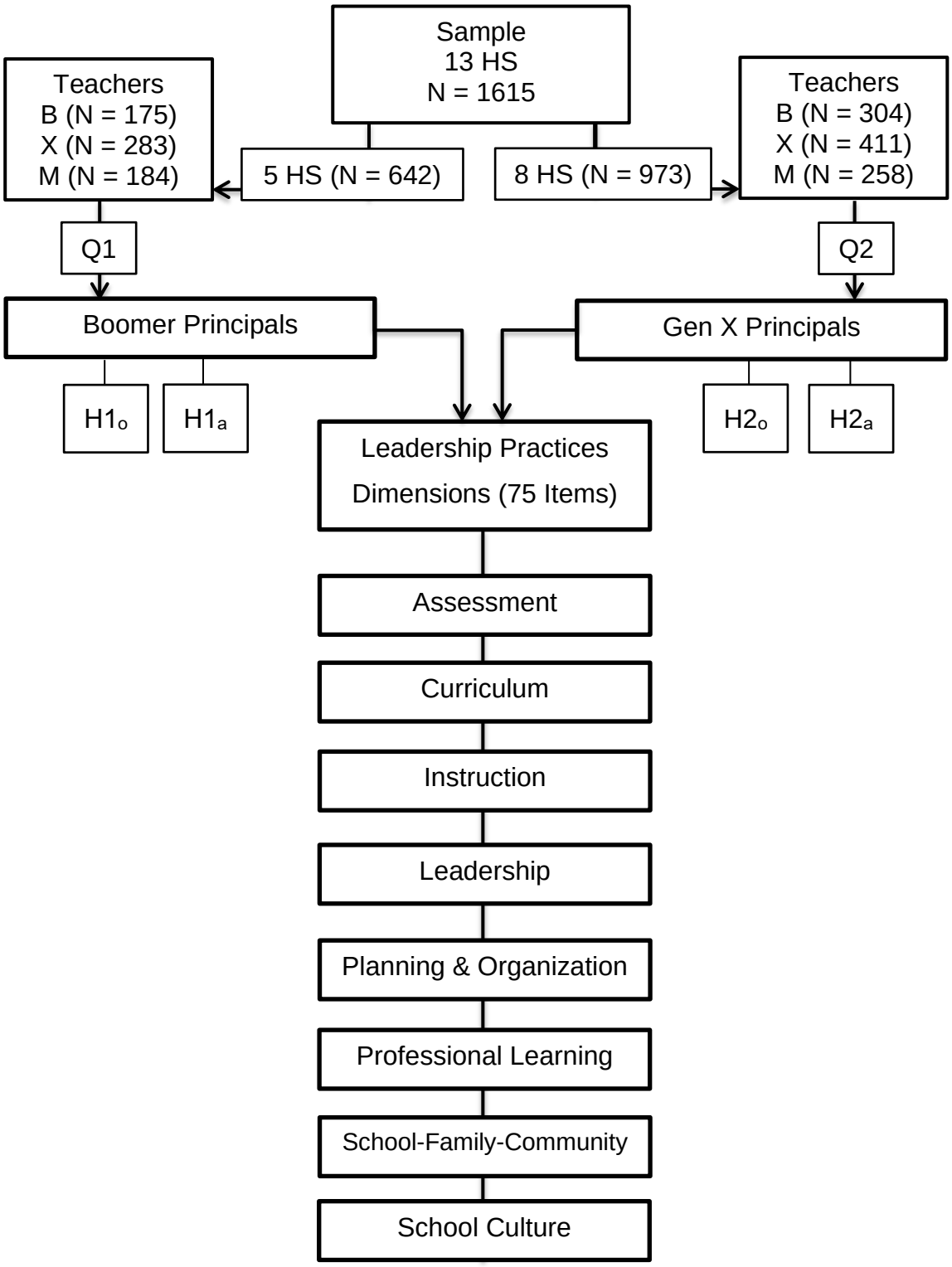


Figure 2: *Research Sample Flow Chart of Teachers' Perceptions of Boomer and Gen X Principals' Leadership Practices.*

## Instrument

The School Improvement Opinion Survey (Appendix A) was created by the Georgia Department of Education (GADOE) in 2006 as part of the School Keys data-driven system (Georgia Department of Education, n.d.). The School Keys are the foundation for Georgia's comprehensive school improvement plan. The School Keys describe what personnel in Georgia's schools need to understand, know, and do. The School Improvement Opinion Survey is a source of data collection for schools utilized as part of their improvement initiatives (Georgia Department of Education, n.d.). The survey as a part of the School Keys is intended to serve as a descriptor of effective practices in the schools. The School Keys School Improvement Opinion Survey was aligned with the meta-analysis research of Marzano, et al. (2003) that created eight broad strands: curriculum; instruction; assessment; leadership; planning and organization; professional learning; school-family-community; and school culture.

The survey serves as a tool for all schools in the state of Georgia. It was field-tested in 2004, and was available for all schools in 2006. Content validity of the instrument was established by review by an external third party. The Georgia Partnership for Excellence in Education (GPEE) comprised of a panel of business and educational leaders conducted an external validation study (Georgia Partnership for Excellence in Education, 2010). The GPEE are advocates for policy that impact the improvement of student achievement. They concluded utilizing the School Improvement Opinion survey can guide schools for continuous improvement. GADOE encourages the schools to use the tool to assist measuring the growth towards continuous improvement (Georgia Department of Education, n.d.). While the instrument was developed by the GADOE and

widely used in Georgia school districts, consistent with the parameters federally approved waiver for No Child Left Behind (2001) procedures, the developers did not publish reliability estimates for the instrument, the dimensions, or the items.

To determine the answers to the research questions, this study used the existing 2013 data from the School Improvement Opinion Survey (2006). Teacher's perceptions of school improvement in this survey instrument are an indication of the principal's performance. As illustrated in Figure 3, research studies on principal's leadership practices provide a framework for understanding the effectiveness of the principal's direct and indirect leadership practices (Liethwood, et al., 2006, Marzono, et al., 2003, Stronge, 2012).

The school district has used this survey tool since 2008 to assist principals in their efforts for continuous school improvement. The survey instrument consists of eight principal leadership dimensions that include: assessment, curriculum, instruction, leadership, planning and organization, professional learning, school-family-community, and school culture. There were a total of 75 items on the School Improvement Opinion Survey (2006). Each participant responded to each item and used a 5-point Likert-type scale that consisted of: (1) Consistently, (2) Often, (3) Infrequently, (4) Never, and (5) No Basis to Judge to rank the each item. The items were categorized by the eight dimensions (Table 9).

## Data Collection

The survey was conducted online in the spring of 2013 by the school district as part of its annual data collection to assess school improvement. The researcher first sought approval of Kennesaw State University Institutional Review Board (IRB).

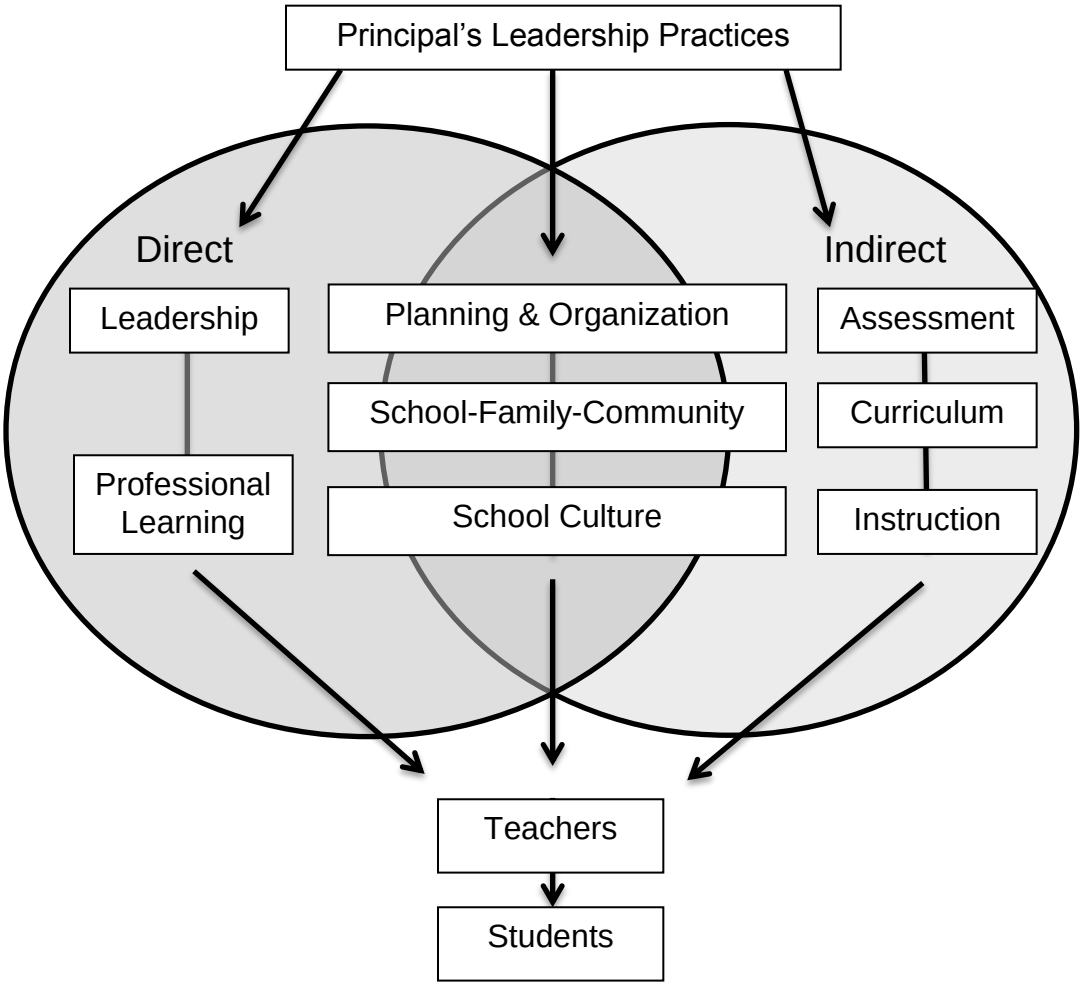


Figure 3: *Direct and Indirect Principal Leadership Practices. Interpreted from Liethwood, et al., 2006, Marzano, et al., 2003, Stronge, 2012*

Table 9

*Survey Items by Dimension*

| Dimension | Items (Appendix A) |
|---|---|
| Assessment | 1, 2, 3, 4, 5, 6, 7, 8, 9 |
| Curriculum | 10, 11, 12, 13, 14, 15, 16, 17 |
| Instruction | 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 |
| Leadership | 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44 |
| Planning and Organization | 45, 46, 47, 48, 49, 50, 51, 52 |
| Professional Learning | 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65 |
| School- Family- Community | 66, 67, 68, 69, 70 |
| School Culture | 71, 72, 73, 74, 75 |

A waiver was granted since there was no direct contact with the sample. Next, the researcher received permission from the district. This was conditional provided that principals agreed to allow the researcher to use the school's data for the study. A letter (Appendix B) was sent to the high school principals requesting permission to use the School Improvement Opinion Survey data for their school in this study. Two weeks after the initial letter was sent, a second request (Appendix C) was sent to the principals who had not responded. Of the 16 high schools in the district, 13 principals elected to participate in this study. The empirical data requested were the participant's years of service, years at current school, and the school.

In order to determine the generation as defined by age the researcher requested from the Human Resources Department the participating principal's age with the teachers

years of service, years at the school, and the school. The survey answers were collected by the school district, and were transferred into an Excel spread sheet by the District's Office of Accountability and analyzed using the Statistical Analysis Software (SAS) package (SAS, 2013). These descriptors were cross-referenced with data requested by the researcher from the district's Human Resources department.

## Data Analysis

Statistical techniques applied to this study for analysis required data to be gathered in sufficient amounts to observe emerging trends and creating summaries (Cooper & Schindler, 2010). Data were collected and analyzed using SAS. Analysis of Variance (ANOVA) is the appropriate statistic for data responding to the research questions and the null and alternative hypotheses. While many descriptive studies exploring new ground often use an alpha level of significance of .10, the researcher used an alpha level of significance of .05. The justification for a stringent significance level was to lower the potential for error with a larger number of analyses, and it would increase the reliability.

The analysis for each of the two research questions were composed of two hierarchical steps. First, a composite total score for each of the eight dimensions was created for each teacher by adding each teacher's perceptual score for each of the items in each dimension. This increases the stability of the estimate of the dimensions perception and reduces the total number of analysis of variance from 75 for all items to 8 for the dimensions. Second, the analysis of variance for any dimension results in a statistically significance difference in the three means, analysis of variance and Tukey post hoc analyses for individual items in the dimension was completed to identify those items

which contributed significantly to the overall dimension score. The 75 item School Improvement Opinion Survey was scored and points were assigned based on the following scale: (1) Consistently, (2) Often, (3) Infrequently, and (4) Never.

## Limitations

The following are characteristics of the study which limited the interpretations of results and/or generalizing conclusions from the results:

- Since many of the items in the instrument are indirect measures of leadership practices about which teachers may not be fully aware, teachers' perception of some of these items may not be valid.
- This study did not examine the various subunits content areas of English, math, science, social studies, fine arts, physical education, or career tech.
- Other demographic informational relationships, such as sex, ethnicity, national origin, years of teaching experience, or level of education exceeded the scope of this research study.
- Reliability about the instrument was not published.

## Ethical Considerations

A waiver was granted from Kennesaw state University IRB since the study did not directly involve the sample. The researcher completed the paperwork requesting authorization from the school district to conduct the study and obtain the data. Once approval was granted by the school district, a letter was sent to the principals (Appendix B) requesting permission to utilize their school's data. This study did not collect any data directly from the participants. The study is in compliance with the researcher's IRB and the school district's requirements for conducting research.

## Summary

This chapter described the framework for a quantitative descriptive research by presenting the procedures and methodology to assess the perceptions of high school teachers from three generational perspectives on principal leadership practices. The research questions and hypotheses were presented to guide the research based on the generational groups of teachers' perception of their principals–Boomer and Gen X-leadership practices. The sample included the generation cohorts– Boomers, Gen X, and Millennials– from 13 high schools in a Georgia metro-county school district. The research utilized the data from the School Improvement Opinion Survey (2006) that includes 75 principal performance predictor variables and criterion variables in eight dimensions: assessment, curriculum, instruction, leadership, planning and organization, professional learning, school–family–community, and school culture. This chapter also detailed the procedures for conducting this study including the research design, the measurement instruments, including validity estimates, procedures for data collection and analysis, limitations, and ethical considerations. Reliability estimates were not published by the creator of the instrument.

## CHAPTER IV: FINDINGS

Chapter I presented the case of the existing gap in present research and the need to provide the foundation for future research associated with the generational perspective of teachers' perceptions of principal leadership practices. Chapter II, the review of literature, provided a perspective of leadership practices of leaders and the generational workforce. The review of literature also suggested a gap might exist among teachers from a generational perspective of the perception of principal leadership practices. Chapter III presented the methodology associated with the research questions, hypothesis, and the survey instrument. Chapter IV reports the findings from the data collection and the statistical analyses along with a discussion of results and conclusions of findings.

The purpose of this quantitative study was to determine if there were any statically significant perceptional differences evident among of the leadership practices of Boomer and Gen X principals based on eight dimensions. The eight dimensions examined were: assessment, curriculum, instruction, leadership, planning and organization, professional learning, school-family-community, and school culture. The present study focused on survey responses to 75 items on the School Improvement Opinion Survey (2006) that was administered throughout the school district in the spring of 2013 pertaining to principal, direct and indirect, leadership practices within the eight dimensions. The results offer insights of the generational cohorts of teachers and their perceptions of Boomer principals and Gen X principal's leadership practices.

## Data Description

The 75 item School Improvement Opinion Survey (2006) used a 5 point Likert scale coded as (1) Consistently, (2) Often, (3) Infrequently, (4) Never, and (5) No Basis to Judge. Consistency is identified by the effectiveness of the principal's leadership practices as perceived by teachers on each of the items. The items of leadership practices were grouped by these dimensions: assessment (Items 1-9), curriculum (Items 10-17), instruction (Items 18-30), leadership (Items 31-44), planning and organization (Items 45-52), professional learning (Items 53-65), school-family-community (Items 66-70), and school culture (Items 71-75). The researcher considered the participant's response of "no basis to judge" to any item the same as any item that was blank as a nonresponse. Missing values or nonresponses in the survey data may lead to biases that do not represent an accurate depiction of the sample (Rubin, 1987). To compensate for missing values, Rubin's (1987) multiple imputation strategy replaces each set of missing values with plausible values. The researcher rejected 8% of the sample who responded "no basis to judge" to all 75 items. To avoid incomplete cases of missing values for other responders, the researcher utilized SAS' multiple imputation procedure that incorporates appropriate variability of the data set. The multiple imputation procedure involves randomly generating a value based on the distribution of surrounding values. Using the surrounding data values, SAS randomly generates a value that is tested multiple times to see how well the value fits. SAS then selects the most likely observation for the missing data. The incomplete cases of missing values were 7% of the data set. The data was first analyzed by dimensions to determine if a statistically significant generational difference of perception existed among the teachers of Boomer principals' (Appendix D) and Gen X

principals' (Appendix E) leadership practices. The dimensions with a statistical significant difference ($p < .05$) were then analyzed by each item for the existence of a significant generational difference in mean scores.

The descriptor categories for the respondents, provided by the school district's Accountability Department for the School Improvement Opinion Survey (2006), were the respondent's current school of employment, years of service at the school, and total years of teaching experience. The demographic categories for the district's high schools that were provided by the Human Resource department served two purposes. First, the descriptor information of the principals consisted of the principal's current school assignment and age. The second descriptor data set consisted of the teacher's current school of employment, years of service at the school, total years of teaching experience, and age. To determine the respondents age, the researcher merged the data sets from the Accountability and Human Resources department. The principals were grouped by the generations Boomers or Gen X. The teachers were grouped by school and by generation. The data were transferred to an Excel spreadsheet, and converted into statistical data for analyses to address the two research questions and hypotheses. The Statistical Analysis Software (SAS) package 9.3 analyzed and coded the data from the School Improvement Opinion Survey (2006) (Appendix D). Two sets research questions and associated null and alternative hypotheses guided the research based on the generational groups of teachers' perception of their principal's–Boomer and Gen X– leadership practices.

1. Are there statistically significant differences among the means of the three generations of teachers' perceptions of the eight dimensions of principal practices on the School Improvement Opinion Survey for schools with a Boomer principal?

$H1_o$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

$H1_a$: There are statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

If $H1_o$ is rejected indicating that there is a statistically significant difference among the means for the three groups of teachers for a dimension, then the following additional research hypotheses will be answered for each of the items that comprise the statistically significant dimension:

$H1_{oi}$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

$H1_{ai}$: There is a statistically significant difference among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

2. Are there statistically significant differences among the means of the three generations of teachers' perceptions of the eight dimensions of principal practices on the School Improvement Opinion Survey for schools with a Gen X principal?

$H2_o$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

$H2_a$: There are statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

If $H2_o$ is rejected indicating that there is a statistically significant difference among the means for the three groups of teachers for a dimension, then the following additional research hypotheses will be answered for each of the items that comprise the statistically significant dimension:

$H1_{oi}$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

$H1_{ai}$: There is a statistically significant difference among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

## Data Analysis of the Sample Participation

Figure 4 illustrates the sample participation response. The response rate to the survey was 74% (1193) of the sample from the 13 high schools (Tables 10-12).

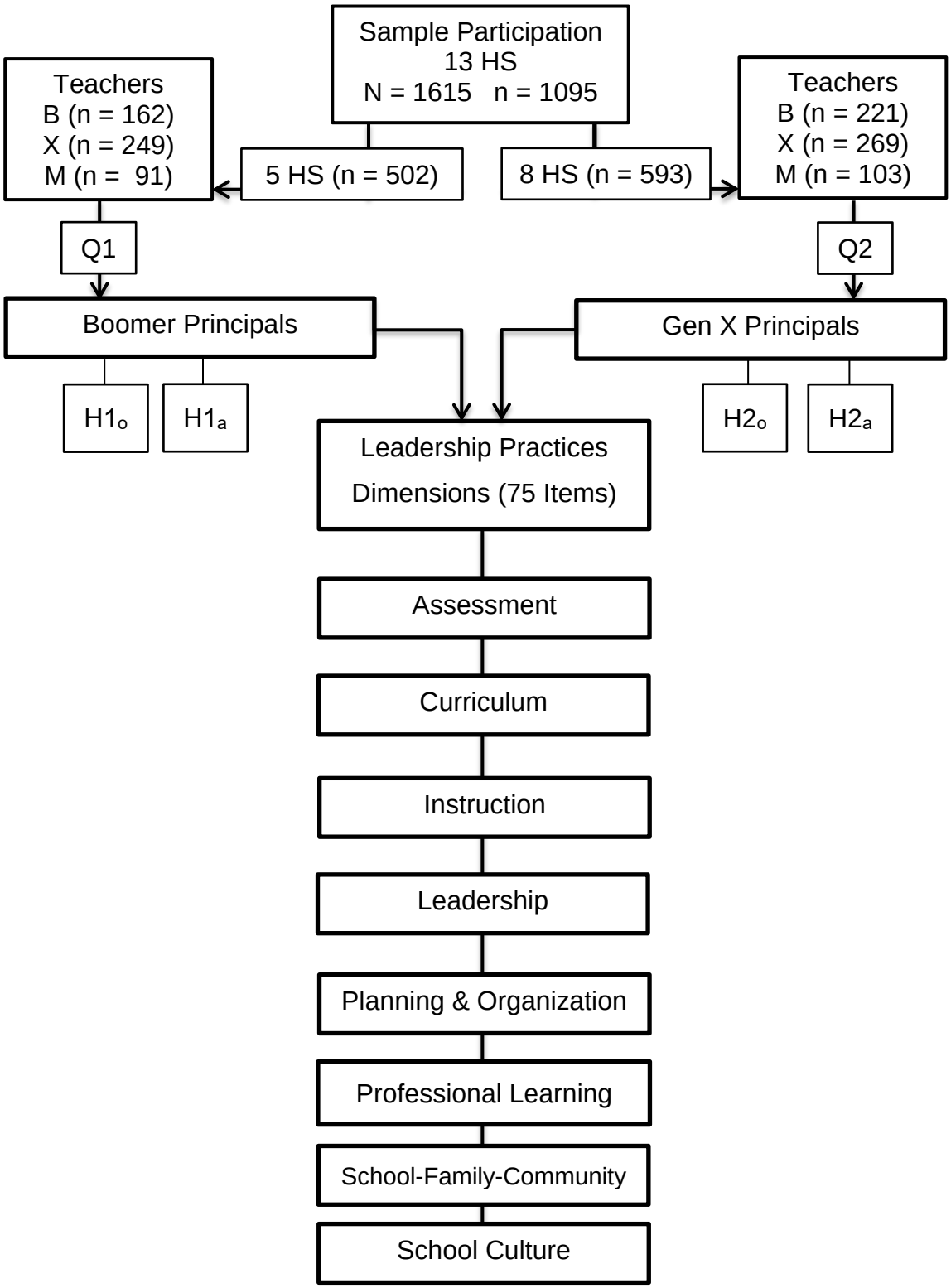


Figure 4: *Sample Participation Response Flow Chart*

Table 10

*Total Sample Teacher Participation*

| | Principal | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Boomer | | | Gen X | | | Total | |
| Sample | N | n | % | N | n | % | N | n |
| Boomers | 175 | 162 | 93 | 304 | 221 | 73 | 479 | 383 |
| Gen X | 283 | 249 | 88 | 411 | 269 | 65 | 694 | 518 |
| Millennials | 184 | 91 | 49 | 258 | 103 | 40 | 442 | 194 |
| Total | 642 | 502 | 78 | 973 | 593 | 61 | 1615 | 1095 |

Table 11

*Boomer Principal School– Teacher Generation Participation*

| Generation | HSB1 | HSB2 | HSB3 | HSB4 | HSB5 | Total |
|---|---|---|---|---|---|---|
| Boomers | 44 | 8 | 54 | 36 | 20 | 162 |
| Gen X | 48 | 20 | 59 | 62 | 60 | 249 |
| Millennials | 29 | 4 | 22 | 26 | 10 | 91 |
| Total | 121 | 32 | 135 | 124 | 90 | 502 |

Table 12

*Gen X Principal School– Teacher Generation Participation*

| Generation | HSX1 | HSX2 | HSX3 | HSX4 | HSX5 | HSX6 | HSX7 | HSX8 | Total |
|---|---|---|---|---|---|---|---|---|---|
| Boomers | 32 | 36 | 18 | 32 | 20 | 24 | 31 | 28 | 221 |
| Gen X | 32 | 32 | 31 | 45 | 21 | 45 | 30 | 33 | 269 |
| Millennials | 15 | 14 | 10 | 11 | 7 | 14 | 18 | 14 | 103 |
| Total | 79 | 82 | 59 | 88 | 48 | 83 | 79 | 75 | 593 |

Of those who responded, 8% (98) were rejected as a nonresponse due to the respondents answering "no basis to judge" to all 75 items, resulting in 68% (1095) who responded. There were five high schools led by a Boomer principal (HSB1- HSB5) with a total response rate of 78% (502) teachers: 162 Boomers, 249 Gen X, and 91 Millennials. Eight high schools were led by a Gen X principal (HSX1 – HSX8) with a response rate of 61% (593) teachers: 221 Boomers, 269 Gen X, and 103 Millennials.

**Data Analysis of Teacher Perception of Boomer Principals**

Appendix D summarizes the statistical analysis of variance performed and computed by ANOVA on teacher's perceptions of the leadership practices of Boomer principal of the eight dimensions. It also includes analyses of variance on the items of the dimensions where $p \leq .05$. ANOVA displays a summary of the key components: mean square, *F* value, and *p* value. Tukey's HSD compared the mean scores, and summarized the mean difference between the generational cohorts. Tables 13 and 14 provide a summary of the sample by presenting the collected data's mean, range, and standard deviation of the dimensions that measured a statistically significant difference in the mean scores. For the purposes of this study, only a summary of the dimensions and items with statistically significant difference are shown in this section.

$H1_o$ stated there are no statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Survey for schools with a Boomer principal. The analyses of the dimensions of assessment, curriculum, instruction, leadership, planning and organization, and professional learning resulted in the acceptance of the null hypothesis. Therefore, there were no statistically significant generational differences among the teachers'

Table 13

*School-Family-Community Dimension Teacher Cohort of Boomer Principals Descriptive Statistics*

| Teacher Cohort | n | Range | Mean | Std. Deviation |
|---|---|---|---|---|
| Boomer | 162 | 1 - 4 | 1.46 | .67 |
| Gen X | 249 | 1 - 4 | 1.56 | .68 |
| Millennials | 91 | 1 - 4 | 1.65 | .69 |
| Total | 502 | 1 - 4 | 1.54 | .69 |

Table 14

*School Culture Dimension Teacher Cohort of Boomer Principals Descriptive Statistics*

| Teacher Cohort | n | Range | Mean | Std. Deviation |
|---|---|---|---|---|
| Boomer | 162 | 1 - 4 | 1.48 | .65 |
| Gen X | 249 | 1 - 4 | 1.57 | .65 |
| Millennials | 91 | 1 - 4 | 1.64 | .70 |
| Total | 502 | 1 - 4 | 1.56 | .66 |

perceptions of the leadership practices of Boomer principals in six of the eight dimensions.

$H1_a$ stated that there are statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Survey for schools with a Boomer principal. The analysis of variance in Table 15 resulted in the rejection of the null hypothesis for the dimensions of school-family-community, $p \leq .02$, and school culture, $p \leq .05$. In the school-family-

Table 15

*Dimensions with Statistically Significant Differences Analysis of Variance of Teacher Perceptions of Boomer Principals*

| Dimension | Mean Square | *F* | *p*-value p ≤ |
|---|---|---|---|
| School- Family-Community | 1.17 | 4.06 | .02 |
| School Culture | .85 | 3.09 | .05 |

community dimension 3 of the 5 items rejected the additional research null hypothesis. There were 2 of the 5 items in the school culture dimension rejected the additional research null hypothesis.

**School-Family-Community**

The analyses of variance in Appendix D for the school-family-community dimension resulted in the acceptance of the additional research null hypothesis for items 68 and 70. The analyses of variance and the post hoc analysis (Table 16) using Tukey's HSD, resulted in the rejection of the additional research null hypothesis indicating that the mean scores were statistically significantly different for items 66, 67, and 69. The statistic and associated probability for item 66 was statistically significance, $p \leq .02$. The post hoc analyses indicated that there was a statistically significantly lower mean score for Boomer teachers (M = 1.46, SD = .67) than Millennial teachers (M = 1.65, SD = .69). The statistic and associated probability for item 67 was statistically significance, $p \leq .01$. Post hoc analyses indicated there was a statistically significantly lower mean score for Gen X teachers (M = 1.56, SD = .68) and Boomer teachers (M = 1.46, SD = .67) than Millennial teachers (M = 1.65, SD = .69). The statistic and associated probability for item

Table 16

*School-Family-Community Statistically Significant Teacher Differences of Boomer Principals Tukey Results*

| Item | Generational Cohort | | *F* | *p*-value p ≤ |
|---|---|---|---|---|
| 66. Opportunities for communication exist in both directions between the home and school. | Boomers* | Millennials | 3.97 | .02 |
| 67. Opportunities exist for parents to participate in training and informational sessions to enhance student performance. | Gen X*<br>Boomers* | Millennials<br>Millennials | 4.24 | .01 |
| 69. Opportunities exist for parents and community members to participate in school governance, decision making, and problem solving. | Boomers*<br>Boomers* | Millennials<br>Gen X | 5.18 | .01 |

* Statistically significantly lower mean score.

69 was statistically significance, $p \leq .01$. Post hoc analyses showed the mean score for Boomer teachers (M = 1.46, SD = .67) were statistically significantly lower than for Gen X (M = 1.56, SD = .68) and Millennial teachers (M = 1.65, SD = .69). The statistically significantly lower mean score for item 66 of Boomer teachers indicated their view of the leadership practices of Boomer principals were consistently more effective in communicating with parents as compared to the views of Millennial teachers of the same leadership practices of Boomer principals. The statistically significantly lower mean score of Boomer and Gen X teachers for item 67 indicated that their view of the leadership practices of Boomer principals were consistently more effective in providing opportunities for parents to participate in training and informational sessions as compared to the views of Millennial teachers of the same leadership practices of Boomer principals.

The statistically significantly lower mean score of Boomer teachers for item 69 indicated that their view of Boomer principals' leadership practices were consistently more effect in providing opportunities for parents and community members to participate in school governance as compared to the views of Gen X or Millennial teachers of the same leadership practices of Boomer principals.

**School Culture**

The analyses of variance in Appendix D for the school culture dimension resulted in the acceptance of the additional research null hypothesis for items 72, 74, and 75. The statistic and associated probability for items 71 and 73 resulted in the rejection of the additional research null hypotheses. The analyses of variance and post hoc analysis using Tukey's HSD, indicated that the statistic and associated probability of the mean scores were statistically significantly different for items 71, $p \leq .05$, and item 73, $p \leq .03$ (Table 17).The post hoc analyses indicated for items 71 and 73 that there was a statistically significantly lower mean score for Boomer teachers (M = 1.48, SD = .65) than Gen X teachers (M = 1.57, SD = .65) and Millennial teachers (M = 1.64, SD = .70).

The statistically significantly lower mean score of Boomer teachers for item 71 indicated their view of the leadership practices of Boomer principals were consistently more effective in providing support to promote the academic achievement of all learners as compared to the views of Millennial teachers of the same leadership practices of Boomer principals. The statistically significantly lower men score of Boomer teachers for item 73 indicated their view of the leadership practices of Boomer principals were consistently more effective in school policies and practices that promote respect for individual differences as compared to the view of Gen X teachers of the same leadership practices of Boomer principals.

Table 17

*School Culture Statistically Significant Teacher Differences of Boomer Principals Tukey Results*

| Item | Generational Cohort | | *F* | *p*-value p ≤ |
|---|---|---|---|---|
| 71. Our school provides support to promote the academic achievement of all learners. | Boomers* | Millennials | 2.99 | .05 |
| 73. School policies, practices, and experiences promote respect for individual differences. | Boomers* | Gen X | 3.49 | .03 |

* Denotes statistically significant lower mean score.

**Data Analysis of Teacher Perception of Gen X Principals**

Appendix E summarizes the statistical analyses of variance performed and computed by ANOVA on the eight dimensions. It also includes analyses of variance on the items of the dimensions where $p \leq .05$. The ANOVA displays a summary of the key components: mean square, *F* value, and *p* value. Tukey's HSD compared the mean scores, and summarized the mean difference between the generational cohorts. Tables 18 to 24 provide a summary of the sample by presenting the collected data's mean, range, and standard deviation of the dimensions that measured a statistically significant difference in mean scores. For the purposes of this study only a summary of the dimensions and items with statistically significant difference are shown in this section.

$H2_o$ stated there are no statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Survey for schools with a Gen X principal. The analysis of variance for the

Table 18

*Assessment Dimension Teacher Cohort of Gen X Principals Descriptive Statistics*

| Teacher Cohort | n | Range | Mean | Std. Deviation |
|---|---|---|---|---|
| Boomers | 221 | 1 - 4 | 1.49 | .63 |
| Gen X | 269 | 1 - 4 | 1.53 | .62 |
| Millennials | 103 | 1 - 4 | 1.39 | .58 |
| Total | 593 | 1 - 4 | 1.49 | .62 |

Table 19

*Curriculum Dimension Teacher Cohort of Gen X Principals Descriptive Statistics*

| Teacher Cohort | n | Range | Mean | Std. Deviation |
|---|---|---|---|---|
| Boomers | 221 | 1 - 4 | 1.54 | .68 |
| Gen X | 269 | 1 - 4 | 1.60 | .67 |
| Millennials | 103 | 1 - 4 | 1.44 | .62 |
| Total | 593 | 1 - 4 | 1.54 | .67 |

Table 20

*Instruction Dimension Teacher Cohort of Gen X Principals Descriptive Statistics*

| Teacher Cohort | n | Range | Mean | Std. Deviation |
|---|---|---|---|---|
| Boomers | 221 | 1 - 4 | 1.64 | .70 |
| Gen X | 269 | 1 - 4 | 1.68 | .69 |
| Millennials | 103 | 1 - 4 | 1.48 | .62 |
| Total | 593 | 1 - 4 | 1.63 | .68 |

Table 21

*Leadership Dimension Teacher Cohort of Gen X Principals Descriptive Statistics*

| Teacher Cohort | n | Range | Mean | Std. Deviation |
|---|---|---|---|---|
| Boomers | 221 | 1 - 4 | 1.67 | .78 |
| Gen X | 269 | 1 - 4 | 1.72 | .76 |
| Millennials | 103 | 1 - 4 | 1.52 | .69 |
| Total | 593 | 1 - 4 | 1.66 | .76 |

Table 22

*Planning and Organization Dimension Teacher Cohort of Gen X Principals Descriptive Statistics*

| Teacher Cohort | n | Range | Mean | Std. Deviation |
|---|---|---|---|---|
| Boomers | 221 | 1 - 4 | 1.59 | .68 |
| Gen X | 269 | 1 - 4 | 1.63 | .68 |
| Millennials | 103 | 1 - 4 | 1.48 | .63 |
| Total | 593 | 1 - 4 | 1.59 | .67 |

Table 23

*Professional Learning Dimension Teacher Cohort of Gen X Principals Descriptive Statistics*

| Teacher Cohort | n | Range | Mean | Std. Deviation |
|---|---|---|---|---|
| Boomers | 221 | 1 - 4 | 1.60 | .73 |
| Gen X | 269 | 1 - 4 | 1.66 | .72 |
| Millennials | 103 | 1 - 4 | 1.47 | .65 |
| Total | 593 | 1 - 4 | 1.61 | .72 |

Table 24

*School Culture Dimension Teacher Cohort of Gen X Principals Descriptive Statistics*

| Teacher Cohort | n | Range | Mean | Std. Deviation |
|---|---|---|---|---|
| Boomers | 221 | 1 - 4 | 1.55 | .67 |
| Gen X | 269 | 1 - 4 | 1.56 | .65 |
| Millennials | 103 | 1 - 4 | 1.42 | .59 |
| Total | 593 | 1 - 4 | 1.54 | .65 |

dimension of school-family-community was the only dimension that resulted in the acceptance of the null hypothesis.

$H1_a$ stated that there are statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Survey for schools with a Gen X principal. The analyses of variance in Table 25 resulted in the rejection of the null hypothesis for the dimensions of assessment, $p \leq .02$, curriculum, $p \leq .01$, instruction, $p \leq .002$, leadership, $p \leq .003$, planning and organization, $p \leq .02$, professional learning, $p \leq .01$, and school culture, $p \leq .02$. Statistically significant generational differences in teachers' perceptions were overall 31 of the 75 survey items that resulted in 31 items rejecting the additional research null hypothesis. Within the dimensions were: 4 of the 9 items for Assessment, 3 of the 8 items for Curriculum, 8 of the 13 items for Instruction, 7 of the 14 items for Leadership, 3 of the 8 items for Planning and Organization, 5 of the 13 items for Professional Learning, and 1 of the 5 items for School Culture.

Table 25

*Dimensions with Statistically Significant Differences Analysis of Variance of Teacher Perceptions of Gen X Principals*

| Dimension | Mean Square | *F* | *p*-value $p \leq$ |
|---|---|---|---|
| Assessment | .72 | 3.75 | .02 |
| Curriculum | 1.00 | 4.45 | .01 |
| Instruction | 1.48 | 6.51 | .002 |
| Leadership | 1.45 | 5.96 | .003 |
| Planning and Organization | 1.01 | 4.03 | .02 |
| Professional Learning | 1.24 | 4.65 | .01 |
| School Culture | 1.08 | 3.96 | .02 |

**Assessment**

The analyses of variance in Appendix E for the assessment dimension resulted in the acceptance of the additional research null hypothesis for items 1, 2, 3, 8 and 9. In Table 26, the analyses of variance and the post hoc analyses using Tukey's HSD, resulted in the rejection of the additional research null hypothesis indicating that the statistic and associated probability of the mean scores were statistically significantly different for item 4, $p \leq .04$, item 5, $p \leq .03$, item 6, $p \leq .04$, and item 7, $p \leq .04$. The post hoc analyses indicated that there was a statistically significantly lower mean score on items 4, 5, 6, and 7 for Millennial teachers (M = 1.39, SD = .58) than Gen X teachers (M = 1.53, SD = .62).

The statistically significantly lower mean scores of Millennial teachers for items 4, 5, and 7 indicated that their view of the leadership practices of Gen X principals were consistently more effective having teachers use diagnostic assessments to evaluate

Table 26

*Assessment Statistically Significant Teacher Differences of Gen X Principals Tukey Results*

| Item | Generational Cohort | | *F* | *p*-value p ≤ |
|---|---|---|---|---|
| 4. Diagnostic assessments are used to adjust instruction to accommodate students' readiness levels. | Millennials* | Gen X | 3.23 | .04 |
| 5. Teachers use a variety of formative assessments to monitor student progress and adjust instruction. | Millennials* | Gen X | 3.55 | .03 |
| 6. Collaboration on data analysis guides and informs grade-level and school-wide decision making. | Millennials* | Gen X | 3.23 | .04 |
| 7. Teachers use a variety of summative assessment tasks to evaluate student achievement of CCGPS. | Millennials* | Gen X | 3.18 | .04 |

* Statistically significantly lower mean score.

student progress as compared to the views of Gen X teachers of the same leadership practices of Gen X principals. The statistically significantly lower mean score of Millennial teachers for item 6 indicated that their view of the leadership practices of Gen X principals were consistently more effective with collaborating on data analysis of student progress and school-wide decision making as compared to the views of Gen X teachers of the same leadership practices of Gen X principals.

**Curriculum**

The analyses of variance in Appendix E for the curriculum dimension resulted in the acceptance of the additional research null hypothesis for items 10, 11, 13, 14 and 16. The analyses of variance and the post hoc analyses using Tukey's HSD, resulted in the rejection of the additional research null hypothesis for the curriculum dimension showing

that the statistic and associated probability of the mean scores were statistically significantly different for item 12, $p \leq .03$, item 15, $p \leq .03$, and item 17, $p \leq .03$ (Table 27). The post hoc analyses indicated that there was a statistically significantly lower mean score for Millennial teachers (M =1.44, SD = .62) than Gen X teachers (M = 1.60, SD = .67).

The statistically significantly lower mean scores of Millennial teachers for items 12, 15, and 17 indicated that their view of leadership practices of Gen X principals were more effective having teachers design curriculum units with depth of understanding and rigor, analyze student work collaboratively, and revise curriculum through performance data of student work as compared to the views of Gen X teachers of the same leadership practices of Gen X principals.

**Instruction**

The analyses of variance in Appendix E for the instruction dimension resulted in the acceptance of the additional research null hypothesis for items 19, 20, 23, 25 and 26. In Table 28, the analyses of variance and the post hoc analyses using Tukey's HSD, resulted in the rejection of the additional research null hypothesis indicating that the statistic and associated probability of the mean scores were statistically significantly different for item 18, $p = .003$, item 21, $p \leq .003$, item 22, $p \leq .001$, item 24, $p \leq .04$, item 27, $p \leq .04$, item 28, $p \leq .01$, item 29, $p \leq .01$, and item 30, $p \leq .01$. The post hoc analyses indicated that there was a statistically significantly lower mean score on items 18, 24, 27, 29, and 30 for Millennial teachers (M = 1.48, SD = .62) than Gen X teachers (M = 1.68, SD = .69). For items 21, 22, and 28 there was a statistically significantly lower mean score for Millennial teachers (M = 1.48, SD = .62) than Gen X teachers (M = 1.68, SD = .69) and Boomer teachers (M = 1.64, SD = .70).

Table 27

*Curriculum Statistically Significant Teacher Differences of Gen X Principals Tukey Results*

| Item | Generational Cohort | | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|
| 12. Our curriculum maps and units are designed to ensure all students participate in a curriculum that requires depth of understanding and rigor. | Millennials* | Gen X | 3.37 | .03 |
| 15. Our teachers analyze student work collaboratively to build consensus for a common understanding of proficiency and rigor. | Millennials* | Gen X | 3.65 | .03 |
| 17. Performance data and the review of student work are used to revise curriculum implementation and to align resources. | Millennials* | Gen X | 3.39 | .03 |

* Statistically significantly lower mean score.

Table 28

*Instruction Statistically Significant Teacher Differences of Gen X Principals Tukey Results*

| Item | Generational Cohort | | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|
| 18. An organizing framework that aligns curriculum, assessment, and instruction is utilized to plan quality teaching and learning. | Millennials* | Gen X | 5.81 | .003 |
| 21. Learning goals are explicitly communicated to our students. | Millennials*<br>Millennials* | Gen X<br>Boomers | 5.70 | .003 |
| 22. Teachers use a variety of research based instructional strategies. | Millennials*<br>Millennials* | Gen X<br>Boomers | 7.32 | .001 |
| 24. Differentiated instruction, adjustment of content, product, process and/or learning environment, is provided to support students according to their instructional needs. | Millennials* | Gen X | 3.28 | .04 |
| 27. Technology is effectively utilized to maximize student learning. | Millennials* | Boomers | 3.20 | .04 |
| 28. Our students are engaged in work that is authentic, standards-drive and requires higher-order reasoning. | Millennials*<br>Millennials* | Gen X<br>Boomers | 4.31 | .01 |
| 29. Teachers and students work collaboratively to establish high expectations and challenging learning goals. | Millennials* | Gen X | 4.77 | .01 |
| 30. Students identify and apply evaluation criteria and monitor achievement of those criteria utilizing such tools as benchmark, work, rubrics, anchor papers, scoring guides, and evaluation checklists. | Millennials* | Gen X | 4.43 | .01 |

* Statistically significantly lower mean score.

The statistically significantly lower mean scores of Millennial teachers for items 18, 24, 29, and 30 indicated their view of the leadership practices of Gen X principals were consistently more effective as compared to the views of Gen X teachers where Gen X principals support and promote teachers to:

- Utilize an organizing framework to plan quality teaching and learning.
- Provide support to students through differentiated instruction, adjustment of content, product, process and/or learning environment.
- Work collaboratively with students to establish high expectations and challenging learning goals.
- Encourage students to monitor achievement.

**Leadership**

The analyses of variance in Appendix E for the leadership dimension resulted in the acceptance of the additional research null hypothesis for items 31, 32, 33, 34, 36, 37 and 43.The analyses of variance and the post hoc analyses using Tukey's HSD, resulted in the rejection of the additional research null hypothesis for the leadership dimension indicating that the statistic and associated probability of the mean scores were statistically significantly different for item 35, $p \leq .03$, item 38, $p \leq .03$, item 39, $p \leq .001$, item 40, $p \leq .0001$, item 41, $p \leq .03$, item 42, $p \leq .04$, and item 44, $p \leq .01$ (Table 29). On items 35, 38, 39, 41, 42, and 44 the post hoc analyses indicated that there was a statistically significantly lower mean score for Millennial teachers (M = 1.44, SD = .62) than Gen X teachers (M = 1.60, SD = .67). For item 40 there was a statistically significantly lower mean score for Millennial teachers (M = 1.44, SD = .62) than Gen X teachers (M = 1.60, SD = .67) and Boomer teachers (M = 1.67, SD = .78).

Table 29

*Leadership Statistically Significant Teacher Differences of Gen X Principals Tukey Results*

| Item | Generational Cohort | | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|
| 35. Our principal and other school administrators implement policies, practices, and procedures that ensure a safe and orderly learning environment. | Millennials* | Gen X | 3.55 | .03 |
| 38. Our principal and other school administrators collaborate with staff members and other stakeholders to elicit input and provide opportunities for shared decision-making and problem-solving. | Millennials* | Gen X | 3.63 | .03 |
| 39. Staff members have opportunities to serve in a variety of leadership roles. | Millennials* | Gen X | 6.82 | .001 |
| 40. Our school receives help from outside agencies like Metro RESA, colleges, businesses and the Ga. Dept. of Education. | Millennials*<br>Millennials* | Gen X<br>Boomers | 9.57 | <.0001 |
| 41. Our school has a fully operational Leadership Team that is Representative of our entire staff. The team conducts regular, results-driven meetings and exists to address student achievement and overall academic success. | Millennials* | Gen X | 3.38 | .03 |
| 42. Our Leadership Team has a system for handling business, making decisions, and solving problems. | Millennials* | Gen X | 3.20 | .04 |
| 44. Our Leadership Team uses current data to identify school performance needs. | Millennials* | Gen X | 4.52 | .01 |

* Statistically significantly lower mean score.

The statistically significantly lower mean score of Millennial teachers for item 40 indicated their view of the leadership practices of Gen X principals were consistently more effective in obtaining assistance outside agencies as compared to either Boomer or Gen X teachers on the same leadership practices of Gen X principals. Also, within this dimension leadership, the statistically significantly lower mean scores by Millennial teachers for items 35, 38, 39, 41, 42, and 44 indicated their view of the leadership practices of Gen X principals were consistently more effective as compared to the views of Gen X teachers of Gen X principals when it involved:

- Implement policies, practices, and procedures that ensure a safe learning environment.
- Collaborate with staff members and other stakeholders to elicit input and provide opportunities for shared decision-making and problem-solving.
- Create opportunities for staff members to serve in a variety of leadership roles.
- The school has a fully operational Leadership Team that is representative of our entire staff.
- Uses current data to identify school performance needs.
- Has a system for handling business, making decisions, and solving problems.

**Planning and Organization**

The analyses of variance in Appendix E for the planning and organization dimension resulted in the acceptance of the additional research null hypothesis for items 45, 47, 48, 49 and 50. In Table 30, the analyses of variance and the post hoc analyses using Tukey's HSD, resulted in the rejection of the additional research null hypothesis indicating that the statistic and associated probability of the mean scores were statistically

Table 30

*Planning and Organization Statistically Significant Teacher Differences of Gen X Principals Tukey Results*

| Item | Generational Cohort | | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|
| 46. Our school improvement plan was created with staff input. | Millennials* | Gen X | 3.15 | .04 |
| 51. Instructional time is maximized, and no interruptions occur to detract from time on learning. | Millennials* | Gen X | 3.23 | .04 |
| 52. Our school facility is adequately maintained, clean, and conducive for teaching and learning. | Millennials* | Gen X | 3.45 | .03 |

* Statistically significantly lower mean score.

significantly different for item 46, $p \leq .04$, item 51, $p \leq .04$, and item 52, $p \leq .03$. The post hoc analyses indicated that there was a statistically significantly lower mean score on items 46, 51, and 52 for Millennial teachers (M = 1.48, SD = .63) than Gen X teachers (M = 1.63, SD = .68).

The statistically significantly lower mean scores of Millennial teachers for items 46, 51, and 52 indicated that their views of the leadership practices of Gen X principals were more consistently effective when teachers were involved in creating the school improvement plan, maximizing instructional time with minimal interruptions, and ensuring that the school is adequately maintained and clean as compared to the views of Gen X teachers on the same leadership practices of Gen X principals.

**Professional Learning**

The analyses of variance in Appendix E for the professional learning dimension resulted in the acceptance of the additional research null hypothesis for items 54, 55, 56,

57, 60, 63, 64 and 65.The analyses of variance and the post hoc analyses using Tukey's HSD resulted in the rejection of the additional research null hypothesis indicating that the statistic and associated probability of the mean scores were statistically significantly different for item 53, $p \leq .01$, item 58, $p \leq .01$, item 59, $p \leq .01$, item 61, $p \leq .03$, and item 62, $p \leq .001$ (Table 31). The post hoc analyses for items 58, 59, 61, and 62 indicated that there was a statistically significantly lower mean score for Millennial teachers (M = 1.47, SD = .65) than Gen X teachers (M = 1.66, SD = .72). For item 53 there was a statistically significantly lower mean score for Millennial teachers (M = 1.47, SD = .65) than Gen X (M = 1.66, SD = .72) and Boomer teachers (M = 1.60, SD = .73).

The statistically significantly lower mean score of Millennial teachers for item 53 indicated their view of the leadership practices of Gen X principals were consistently more effective in providing job-embedded professional learning as compared to the views of Boomer or Gen X teachers on the same leadership practices of Gen X principals. Additionally, the statistically significantly lower mean scores of Millennial teachers for items 58, 59, 61, and 62 indicated their view of the leadership practices of Gen X principals were consistently more effective as compared the views of Gen X when Gen X principals provided opportunities in professional learning to:

- Create teams meet to review and study current research to make informed instructional decisions.
- Provide long-term in-depth professional learning.
- Prepare teachers in practices with respect for diverse cultural backgrounds.
- Prepare teachers to adjust instruction to meet the needs of diverse learners.

Table 31

*Professional Learning Significantly Significant Teacher Differences of Gen X Principals Tukey Results*

| Item | Generational Cohort | | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|
| 53. Teachers and administrators participate in job-embedded professional learning and collaboration addressing curriculum, assessment, instruction, and technology. | Millennials* | Gen X | 4.63 | .01 |
| | Millennials* | Boomers | | |
| 58. Teams meet to review and study current research to make informed instructional decisions. | Millennials* | Gen X | 4.72 | .01 |
| 59. The staff participates in long-term in-depth professional learning which is aligned with our school improvement goals. | Millennials* | Gen X | 4.33 | .01 |
| 61.Our professional learning prepares us in practices that convey respect for diverse cultural backgrounds and high expectations for all students. | Millennials* | Gen X | 3.62 | .03 |
| 62. Our professional learning prepares teachers to adjust instruction and assessment to meet the needs of diverse learners. | Millennials* | Gen X | 6.65 | .001 |

* Statistically significantly lower mean score.

**School Culture**

The analyses of variance in Appendix E for the school culture dimension resulted in the acceptance of the additional research null hypothesis for items 71, 72, 74 and 75. In Table 32, the analyses of variance and the post hoc analysis using Tukey's HSD, resulted in the rejection of the additional research null hypothesis indicating that the statistic and associated probability of the mean scores were statistically significantly different for item

Table 32

*School Culture Significantly Significant Teacher Differences of Gen X Principals Tukey Results*

| Item | Generational Cohort | | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|
| 73. School policies, practices, and experiences promote respect for individual differences. | Millennials* | Gen X | 7.91 | .0004 |
| | Millennials* | Boomers | | |
| | Boomers* | Gen X | | |

* Statistically significantly lower mean score.

73, $p \leq .0004$. The post hoc analyses indicated that there was a statistically significantly lower mean score for Millennial teachers (M = 1.42, SD = .59) than Gen X (M = 1.56, SD = .67) and Boomer teachers (M = 1.55, SD = .67); furthermore, the mean scores for Boomer teachers (M = 1.55, SD = .67) were statistically significantly lower than Gen X teachers (M = 1.56, SD = .67).

The statistically significantly lower mean score of Millennial teachers for item 73 indicated their view of the leadership practices of Gen X principals was consistently more effective when implementing school policies and practices that promote respect for individual differences as compared to the views of Boomer and Gen X teachers of the same leadership practices of Gen X principals. Furthermore, the statistically significantly lower mean scores of Boomer teachers for item 73 indicated their view of the leadership practices of Gen X principals were consistently more effective on policies and practices as compared to the views of Gen X teachers of the same leadership practices of Gen X principals.

## Discussion and Interpretation of the Results

The purpose of this research study was to determine whether generational differences existed among teachers in their perceptions of the leadership practices of Boomer and Gen X principals. The dimensions of leadership practices used were: assessment, curriculum, instruction, leadership, planning and organization, professional learning, school-family-community, and school culture. This study found statistically significant differences in the mean scores among the three generations of teachers depending on the leadership dimension, and whether they were led by a Boomer or Gen X principal. The statistically significant generational differences of perception among teachers of the leadership practices of Boomer principals existed in 5 of the 75 survey items. The statistically significant generational differences of perception among teachers of the leadership practices of Gen X principals existed in 31 of the 75 survey items. The pattern that emerged of teachers' perception of principals' leadership practices are illustrated in Figure 5.

### Perceptions of Leadership Practices of Boomer Principals

The pattern that emerged from the data analyses indicated in greater frequency (70 of the 75 items) that there were no statistically significant generational differences of perceptions among teachers of the leadership practices of Boomer principals. Where the data analyses indicated statistically significant generational differences (5 of the 75 items) were in the leadership dimension of school-family-community and school culture. The data indicated of the 5 items statistically significant generational differences occurred in greater frequency among Boomer and Millennial teachers, followed by Boomer and Gen X teachers, and only one occurrence among Boomer and Gen X teachers.

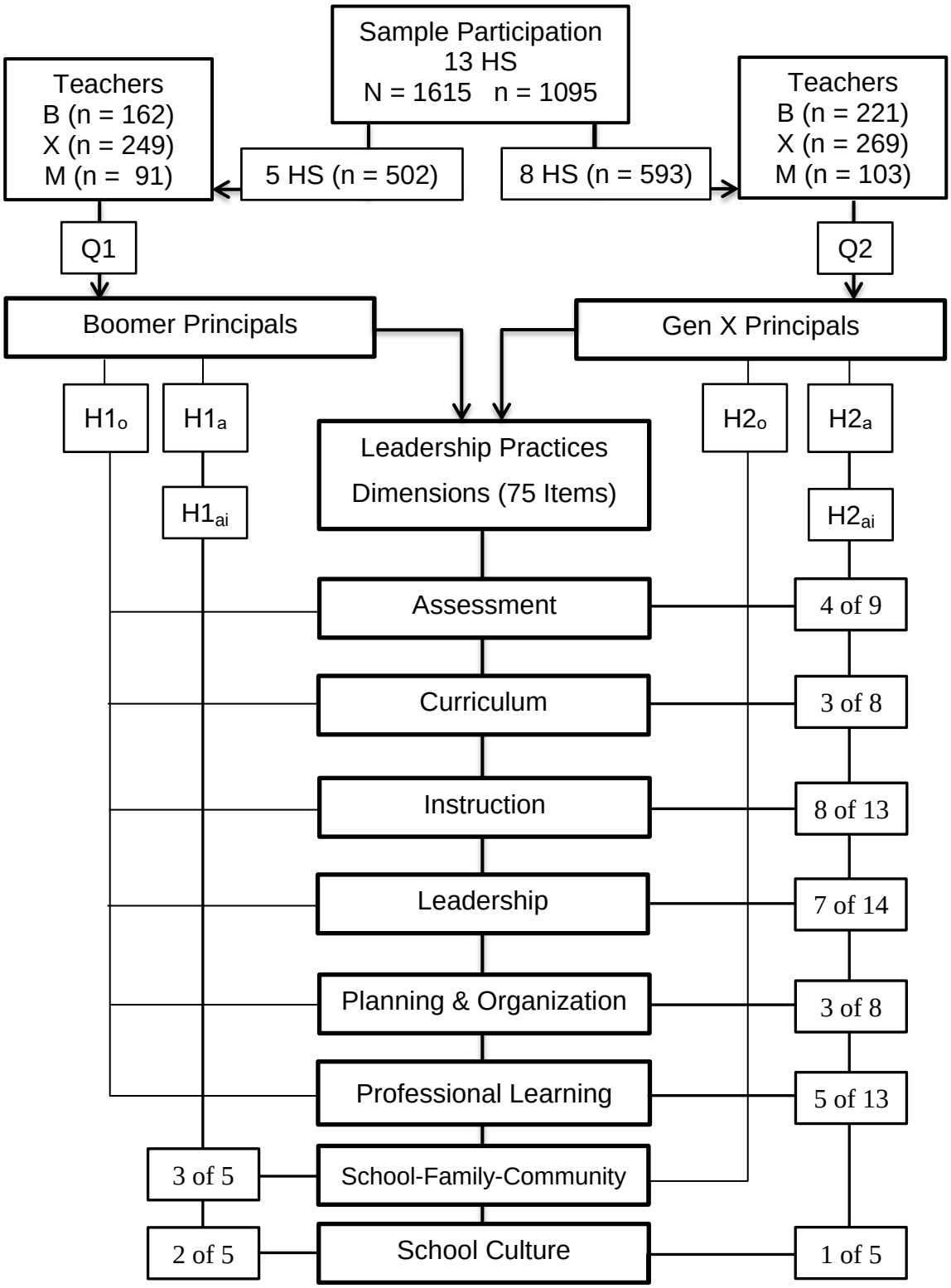


Figure 5: *Teachers' Perceptions of Principals' Leadership Practices Flow Chart*

**School-Family-Community**

Responsibilities of the principal include communication along with community relations with parents, teachers, and the community members (Stronge, Richard, & Catano, 2008). Effective leadership practices bring together various stakeholders with the goal of educating children (Cotton, 2003). Principals that provide opportunities for parents and community members to participate in school governance and decision-making are more effective principals (Stronge, et al., 2008; Cotton, 2003). In this way effective principals leadership practices build professional relationships with teachers, form relationships between parents and school, and foster partnerships with community members. The perceptions of Boomer teachers' perceptions of the leadership practices of Boomer principals were viewed to be more effective in providing open communication to parents and the community as compared to the views of Millennial teachers. Leadership practices of Boomer principals that provide opportunities for parents and the community members to participate in school governance and decision-making were viewed by Boomer teachers to be more effective as compared to the views of Gen X or Millennial teachers.

**School Culture**

Stronge (2012) noted that school culture can influence student outcomes and staff satisfaction. The academic performance of students and the principal's role in creating a positive school culture are linked. Effective leadership practices support and promote a positive learning environment for all learners by enlisting the assistance of parents, teachers, and community members (Cotton, 2003). The

perceptions of Boomer teachers of the leadership practices of Boomer principals' role of supporting and promoting a positive learning environment were viewed to be more effective as compared to the views of Millennial teachers.

**Perceptions of Leadership Practices of Gen X Principals**

The pattern that emerged from the data analyses indicated a greater frequency (31 of the 75 items) that there were statistically significant generational differences of the perceptions among teachers of the leadership practices of Gen X principals. The data analyses indicted statistically significant generational differences were in the leadership dimensions of: assessment, curriculum, instruction, leadership, planning and organization, professional learning, and school culture. The statistically significant generational differences occurred greater frequently among Millennial and Gen X teachers (30 of the 75 items), followed by Millennial and Boomer teachers (7 of the 75 items), and one occurrence among Boomers and Gen X teachers.

**Assessment, Curriculum, and Instruction**

The leadership practices of principals, though indirect, impact student achievement (Leithwood, Day, Sammons, Harris, & Hopkins, 2006). Stronge (2012) noted that one critical component of leadership practices for principals are to prioritize their instructional role by monitoring assessment, curriculum, and instruction. By monitoring assessment, curriculum, and instruction effective principal leadership practices are knowledgeable of curriculum standards, and are able to judge the effectiveness of teaching and instructional practices on student achievement (Marzano, et al., 2005). There were statistically significant

differences in the perceptions among teachers of the leadership practices of Gen X principals' effectiveness as an instructional leader.

The perceptions of Millennial teachers of the leadership practices of Gen X principals were viewed to be more effective as an instructional leader as compared to the perceptions of Boomer teachers in the use of technology for instruction. As an instructional leader, Gen X principals' leadership practices were perceived by Millennial teachers to be more effective than either by Boomer or Gen X teachers in how Gen X principals communicate the visions for research-based learning goals and instructional strategies that require higher-order reasoning. Monitoring student progress of their depth of understanding and rigor and providing support to the instructional needs of students as an instructional leader by Gen X principals were perceived to be more effective by Millennial teachers than by Gen X teachers.

**Leadership, Planning, and Organization**

When principals are visible and are interested in the daily activities of teachers they are seen by teachers to be leaders who are engaged and involved (Stronge, 2012). Effective principals realize the importance of day-to-day planning, and long range planning play in the functional and academic success of their students (Marzano, et al., 2005). Sharing leadership is a leadership practice that effective principals incorporate to meet the instructional goals by providing opportunities for teachers to participate in the decision making process (Hargreaves & Fink, 2004). With a shared leadership structure the principal is able to build relationships by encouraging teachers to share in decision making

responsibilities (Cotton, 2003; Marzano, et al., 2005).There were significant statistical differences of perceptions among the generation of teachers of the effectiveness of the leadership practices of Gen X principals of shared leadership and planning that encourages teachers to participate in the decision making process. Millennial teachers perceived the leadership practices of Gen X principals to be more effective with shared leadership and planning as compared to the perceptions of Gen X teachers.

**Professional Learning**

Principal's leadership practices that promote that lead to effective teaching and mastery of learning are leaders that go beyond only planning and organizing professional development; they become learners with their teachers (Stronge, etal., 2008). Effective principals recognize the importance of a collaborative professional learning community that inspires trust, shared responsibility, and works toward improved student learning (DuFour, Dufour, & Eaker, 2008). Stronge (2012) noted that effective principals lead professional learning communities and stressing the importance of professional learning by being aware and communicating with teachers the current research that is critical to the school's success. There were statistical significant differences in perceptions among the generations of teachers on the effectiveness of the leadership practices of Gen X principals on the importance of collaborative professional learning and communicating current research critical to the success of the school. Millennial perceived the leadership practices of Gen X principals to be more effective with job-embedded professional learning as compared to the perceptions of Boomer or

Gen X teachers. With trust, shared responsibility, and communicating with teachers on current research the leadership practices of Gen X principals were viewed by Millennial teachers as more effective as compared to the views of Gen X teachers.

**Perceptions of Leadership Practices of Boomer and Gen X Principals**

Stronge (2012) stated that effective principals build relationship by sharing in the responsibility of creating policies and practices with a consensus around school norms and respect for the individual. When principals share information, power, and decision-making with teachers they create a relationship of trust (Tschannen-Moran, 2004). There were statistical significant differences among the perceptions of teachers of the leadership practices of both Boomer and Gen X principals in building relationships that respect the individual by sharing information, power, and decision making with the teachers. The effectiveness of the leadership practices of Boomer principals, as well as Gen X principals, in building relationships were perceived more effective by Boomer teachers than by Gen X teachers. With Gen X principals, the effectiveness of their leadership practices in building relationships was perceived to be more effective by Millennial teachers than Boomer or Gen X teachers.

## Summary

The objectives of the study were formulated in the research questions to determine if statistically significant differences in the mean perceptions among the three generations of teachers of their views of the leadership practices of Boomer and Gen X principals. The School Improvement Opinion Survey (2006) instrument provided the basis to address the research questions and hypotheses. Surveying the respondents'

perception of principal leadership practices provided data to support the analyses of this study.

Analyses of the generational perspective to teachers' perception of the leadership practices of Boomer principals accepted the null hypothesis for six of the eight dimensions: assessment, curriculum, instruction, leadership, planning and organization, and professional learning. The analyses of the perceptions among teachers of the leadership practices of Gen X principals only accepted the null hypothesis for the school-family-community dimension.

Statistically significant generational differences in the perception among teachers of the leadership practices of Boomer principals did exist resulting in the rejection of the null hypotheses dimensions of school-family-community and school culture. In the school-family-community dimension 3 of the 5 items showed statistically significant generational differences, and there were statistically significant generational differences in 2 of the 5 items in the school culture dimension.

The statistically significant generational differences in perceptions among teachers of the leadership practices of Gen X principals existed in seven of the eight dimensions: assessment, curriculum, instruction, leadership, planning and organization, professional learning, and school culture. Statistically significant generational differences of the items were within the dimensions of: assessment 4 of the 9 items, curriculum 3 of the 8 items, instruction 8 of the 13 items, leadership 7 of the 14 items, planning and organization 3 of the 8 items, professional learning 5 of the 13 items, and school culture 1 of the 5 items.

While this study did not compare the leadership practices between Boomer and Gen X principals, it should be noted that one item with statistically significant generational differences of the perceptions among teachers of the leadership practices did exist between Boomer and Gen X principals. For both Boomer and Gen X principals, item 73, where their leadership practices on policies that promote respect for the individual indicated there were statistically significant differences in perception for Boomer, Gen X, and Millennial teachers. Of the 75 items on the School Improvement Opinion Survey (2006), only 5 of the 75 items resulted in statistically significant generational differences of the perceptions among teachers of the leadership practices of Boomer principals. On the other hand, 31 of the 75 items resulted in statistically significant generational differences of the perceptions among teachers of the leadership practices of Gen X principals. Chapter IV reviewed the process of the study and the data analyses. The analyzed data summary in this chapter was presented in tables with detailed analyses in the appendices.

## CHAPTER V: CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The purpose of this study was to determine if there were statistically significant differences among the three generations of teachers' perceptions of the leadership practices of Boomer and Gen X principals. The dimensions of direct and indirect leadership practices included: assessment, curriculum, instruction, leadership, planning and organization, professional learning, school-family-community, and school culture. Awareness of generational perceptions may help school principals consider and adopt new leadership practices with consideration of the effectiveness of their actions relative to the generation of teachers. Limited research has been conducted in education to explore the generational perspective of teachers' perceptions of principal's leadership practices. Effective principal leadership practices with a generational perspective have the potential to create strategies that will lead, grow and motivate teachers (Arsenault, 2004: Kupperschmidt, 2000).

Where generational differences do exist among teachers, principals can adapt new competencies to incorporate into their leadership practices that will be the most effective for each generation of teachers (Salopek, 2006). This quantitative study may improve the understanding of possible influences of principal's leadership practices, and how the generational teachers perceive them. The sample consisted of five high schools that were led by Boomer principals and eight high schools that were led by Gen X principals. The instrument utilized was the 75 item School Improvement Opinion Survey (2006) comprised eight dimensions of principal leadership practices: assessment, curriculum,

instruction, leadership, planning and organization, professional learning, school-family-community, and school culture. The two sets research questions and associated null and alternative hypotheses that guided the research based on the generational groups of teachers' perception of their principal's–Boomer and Gen X– leadership practices were:

1. Are there statistically significant differences among the means of the three generations of teachers' perceptions of the eight dimensions of principal practices on the School Improvement Opinion Survey for schools with a Boomer principal?

    $H1_o$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

    $H1_a$: There are statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

If $H1_o$ is rejected indicating that there is a statistically significant difference among the means for the three groups of teachers for a dimension, then the following additional research hypotheses will be answered for each of the items that comprise the statistically significant dimension:

$H1_{oi}$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

$H1_{ai}$: There is a statistically significant difference among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Boomer principal.

2. Are there statistically significant differences among the means of the three generations of teachers' perceptions of the eight dimensions of principal practices on the School Improvement Opinion Survey for schools with a Gen X principal?

   $H2_o$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

   $H2_a$: There are statistically significant differences among the means of the three generations of teachers' perceptions of the eight principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

If $H2_o$ is rejected indicating that there is a statistically significant difference among the means for the three groups of teachers for a dimension, then the following additional research hypotheses will be answered for each of the items that comprise the statistically significant dimension:

$H1_{oi}$: There are no statistically significant differences among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

$H1_{ai}$: There is a statistically significant difference among the means of the three generations of teachers' perceptions of each item which comprise the dimension of the principal practices on the School Improvement Opinion Survey for schools with a Gen X principal.

The major findings obtained from the data suggested that there are statistically significant generational differences among teachers' perception of the leadership practices of Boomer and Gen X principals.

The data indicated that no statistically significant differences of Boomer principals' leadership practices occurred more frequently, 70 of the 75 survey items, among the perceptions of Boomer, Gen X, and Millennial teachers. Statistically significant generational differences that occurred in 5 of the 75 survey items were within the leadership practices dimensions of school-family-community and school culture.

The data indicated that teachers' perceptions of Gen X principals' leadership practices were statistically significant generational difference, 31 of the 75 survey items, occurred more frequently among Millennial and Gen X teachers, followed by Millennial and Boomer teachers, and only one occurrence among Boomers and Gen X teachers. The results among teachers of Gen X principals indicated that statistically significant generational differences existed in 31 of the 75 survey items within all dimensions except school-family-community. The results indicated that the perceptions teachers of Gen X principals' leadership practices were not statistically significant among generational differences in 44 of the 75 survey items.

## Context of Findings

The preliminary literature review of previous generational studies provided evidence that statistically significant differences of the perceptions of leadership practices existed among the generational cohorts. The results of this study confirm that statistically significant generational differences exist among Boomers, Gen X, and Millennial teachers and their perceptions of the leadership practices of Boomer and Gen X principals. The pattern that emerged from the data analysis was the frequency of generational differences of principals' leadership practices existed more with teachers led by Gen X principals than teachers led by a Boomer principals.

A qualitative research study conducted by Fry (2010), investigated the differences in the leadership practices of Boomer and Gen X principals. The study utilized a multi-method, multi-dimension approach to collect the data of case studies among eight principals. The intent of this research was to study the perspectives of principal leadership practices through interviews and observations. Four principals were from the Boomer generation, and four were from the Gen X generation. During the interviews Fry (2010) noted that both the Boomer and Gen X principals agreed on the importance of their roles as an instructional leader. However, when Boomer and Gen X principals described their leadership practices, the emphasis of importance was different. Boomer principals believed the focus of their leadership practices should be as facilitators and supporter of teachers. Gen X principals believed the focus of their leadership practices should be supporters of students. Fry (2010) concluded that Boomer principals advocated for teachers, and Gen X principals advocated for students.

In another study conducted by Yu and Miller (2005), the results indicated that statistically significant generational differences did exist in the perceptions of Boomer, Gen X, and Millennial teachers of the leadership practices depending on whether the leadership was from the a business industry or education. Their research suggested that the leadership practices from principals of different generations may differ from the leadership practices of business leaders. They concluded that the nature of business for industry and education have different aspirations. Workers in industry of this study indicated that their supervisors were micromanagers, whereas, teachers indicated that their principals involved them in the decision making process for the school's success.

**Leadership Practices of Boomer Principals**

Based on the results where 5 out of the 75 survey items indicated statistically significant differences among teachers' perceptions of the leadership practices of Boomer principals were minimal. These findings support the findings of Fry (2010) in that Boomer principals' leadership practices, as advocates for teachers, place emphasis on providing resources and support to teachers where leadership and teachers work collectively together as a team to impact student achievement. Boomer principals prefer consensus and teamwork over efficiency (Zemke et al., 2000).

In a generational study Riescher (2009) found that among workers there were statistically significant generational differences in the perceptions of the organizational culture. However, no statistically significant generational differences were found among workers' perceptions of leadership practices. Riescher (2009) concluded there were more similarities in generational perceptions of leadership practices than differences among workers.

**Leadership Practices of Gen X Principals**

With respect to the findings of the generational differences among teachers of their perceptions of the leadership practices of Gen X principals, statistically significant differences existed. Generational differences in perception occurred more frequently among Millennial and Gen X teachers, followed by perceptual differences among Millennial and Boomer teachers, and finally among Boomer and Gen X teachers. The results of this study support the conclusions by Fry (2010) that Gen X principals' leadership practices are focused on protecting and nurturing the student where Gen X principals tended to advocate for the student more than for the teachers. In addition, Gen X prefers an efficient use of time and is less concerned about peer consensus, teamwork, collaboration, and the needs of the teacher (Zemke et al., 2000). While Gen X principals understand the importance of collaboration and teamwork, they view it as "a waste of time" (Fry, 2010, p. 63).

The results of this study did not support Chan's (2005) generational research of the perceptions among Gen X and Millennial workers on their supervisor's leadership practices. The results indicated that Millennials had higher expectations and were more critical of their immediate supervisor's leadership practices. Whereas, Gen X workers were more accepting of their supervisor's leadership practices. Chan (2005) concluded that there were statistically significant differences among Gen X and Millennial workers of the perceptions of leadership practices in how leaders are implementing policies and routines and strengthening relationships that maximize the organization's performance. The results of Chan (2005) indicated that Gen X workers perceptions of leadership practices were viewed to be more effective as compared to the views of Millennial

workers. The results from this study indicated that Millennial teachers' perceptions of leadership practices of Gen X principals were viewed more effective as compared to the views of Gen X teachers.

## Limitations of Findings

The researcher acknowledges the following limitations of the study:

- The scope of the study was limited to one school district and high schools for one school year.
- The responses to the survey instrument may have been affected by personal bias of the respondents toward their principal.
- Additional reliability estimates of the School Improvement Opinion Survey should be determined for elementary, middle, and high schools in Georgia.

## Implications of Findings

The implications from the findings of this study are applicable to professional leadership development of principals, administrators, and teacher leaders. The results of the findings indicated that generational differences in the perceptions of the leadership practices of Boomer and Gen X principals do exist among teachers. These differences were precipitated by differences in principal leadership practices in the dimensions of: assessment, curriculum, instruction, leadership, planning and organization, professional learning, school-family-community, and school culture. For principals to fulfill many of their obligations and responsibilities, effective leadership practices of principals require a relationship of collaborative between principal and teachers. Understanding the context of the generation of the principal coupled with his/hers leadership practices that influence the generation of teachers is one of many factors impacting school improvement.

School districts need to implement additional principal evaluation systems that include a teacher input component. This will assist principals in their awareness of the effectiveness of their leadership practices.

## Recommendations for Future Research

Few studies have investigated the possible influences from a generational perspective of the perceptions of teachers' perceptions of principal's leadership practices. Even fewer studies have been conducted on the leadership practices based on the generation of the principal. The purpose of this research was to determine if statistically significant generational differences of the perceptions of principal leadership practices exist among a representative sample of teachers. As supported by the review of literature, the premise of the research was that statistically significant generational differences exist among teachers of their perceptions of the leadership practices of principals. When differences among teachers are discovered, it should be determined whether the differences are influenced by generational factors, or if these differences are influenced by other factors.

The findings of this study may help school principals understand and reflect on how their own leadership practices are perceived by teachers. Increasing their knowledge of generational tendencies may help in leadership practices that communicate empathetically to each generation of teachers. The findings of this study will add to the knowledge and skills for the professional development of educational leaders offering opportunities to develop strategies that improve the effectiveness of the leadership with multigenerational teachers. Many opportunities exist for further research in this area. Suggestions for future research include:

- Expanding the demographics to offer addition insight to the generational perceptions of teachers. Additional demographics could include: (a) sex; (b) ethnicity; (c) years of teaching experience; (d) years at the school; (e) part time and retired teachers; or (f) student demographics.
- To conduct a similar study as Millennials begin to serve as principals.
- Expanding the research to include middle and elementary schools.
- Conducting a mixed methods study to, in addition to survey statement, conduct interviews with teachers from each generation on the leadership practices of their principal.
- Conducting generational interviews with principals on the perspectives of their leadership practices.

## Conclusion

The findings of this study indicate that statistically significant generational differences exist among the teacher's perceptions of the leadership practices of Boomer and Gen X principal. The indications support the conclusion that teachers of different generations more frequently have statistically significant differences in their perceptions of the leadership practices with Gen X principals than with Boomer principals. Principal leadership practices that are capable of addressing generational contingencies have the potential of increasing teacher effectiveness. To achieve this goal, principals will need to adjust their leadership practices to be conducive to collaboration, mutual respect, diversity, professional growth, innovation, and building relationships among the generations of teachers.

This study contributes by quantitatively exploring the differences among Boomer, Gen X, and Millennial teachers' perceptions of the leadership practices of Boomer and Gen X principals. Principals can leverage these findings to develop and improve their leadership practices and skills to contend with the generational differences among teachers. There is great potential for principals though professional learning to develop leadership practices that will have an impact school improvement.

# References

Arsenault, P. M. (2004). Validating generational differences: A legitimate diversity and leadership issue. *Leadership & Organizational Development Journal*, *2*, 124-141. Retrieved from http://www.emeraldinsight.com.proxy.kennesaw.edu/search.htm?ct=jnl&fd1=all&bl2=and&st2=%220143-7739%22&fd2=isn&st1=validating+generational+differences

Bolton, S. (2010). *Career motivation theory: Generational differences and their impact on organizations* (Doctoral dissertation, Walden University). Retrieved from http://gradworks.umi.com/33/91/3391445.html

Bureau of Labor Statistics. (2011). *Labor force statistics from the current population survey*. Retrieved from http://www.bls.gov/cps/demographics.htm#older

Burke, M. E. (2004). *Generational differences survey report*. Retrieved from http://www.shrm.org/research/surveyfindings/documents/generational%20differences%20survey%20report.pdf

Burns, J. M. (2010). *Leadership*. New York: Harper Perennial.

Cennamo, L., & Gardner, D. (2008). Generational differences in work values, outcomes and person-organization values fit. *Journal of Managerial Psychology*, *23*(8), 891-906. Retrieved from www.emeraldinsight.com/0268-3946.htm

Chan, D. S. (2005). *Relationship between generation-responsive leadership behaviors and job satisfaction of generations x and y professionals* (Doctoral dissertation, University of Phoenix). Retrieved from http://www.proquest.com/en-US/

Chelladurai, P., & Saleh, S. D. (1980). Dimensions of leader behavior in sports: Development of a leadership scale . *Journal of Sport Psychology*, *2*, 34-45. Retrieved from http://the-coach-athlete-relationship.wikispaces.com/file/view/LSS%20Article.pdf/183886483/LSS%20Article.pdf

Chernoff, A. (2007). *Workplace coaching: Developing leadership skills* (Doctoral dissertation, Royal Roads University). Retrieved from http://www.proquest.com/en-US/

Cooper, D., & Schindler, P. (2010). *Business research methods* (11th ed.). Boston, MA: McGraw-Hill/Irwin.

Cotton, K. (2003). *Principals and student achievement: What the research says*. Alexandria, VA: Association for Supervision and Curriculum Development.

Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Columbus, OH: Merrill Prentice Hall.

Crumpacker, M., & Crumpacker, J. D. (2007). Succession planning and generational stereotypes: Should HR consider age-based values and attitudes a relevant factor or a passing fad? *Public Personnel Management*, *36*(4), 349-369. Retrieved from http://hoosonline.virginia.edu/atf/cf/%7Bbda77a21-0229-499a-ae10-eadbe96789d6%7D/SUCCESSION%20PLANNING_GENERATIONAL.PDF

Culp, K. (2011). *Understanding generational differences*. Retrieved from http://www.ca.uky.edu/agc/pubs/cld1/cld18/cld18.PDF

Davis, J., Pawlowski, S., & Houston, A. (2006). Work commitments of baby boomers and gen xers in the IT profession: Generational differences or myth. *Journal of Computer Information Systems*, *46*(3), 43-49. Retrieved from http://connection.ebscohost.com

Davis, S., Kearney, K., Sanders, N., Thomas, C., & Leon, R. (2011). *The policies and practices of principal evaluation: A review of the literature*. Retrieved from http://www.wested.org/online_pubs/resource1104.pdf

DuFour, R., Dufour, R., & Eaker, R. (2008). *Revisiting professional learning communities at work*. Bloomington, IN: Solution Tree.

Dychtwald, K., Erickson, T. J., & Morison, R. (2006). *Workforce crisis: How to beat the coming shortage of skills and talent*. Boston, MA: Harvard Business School Publishing.

Ebenkamp, B. (1999). The xer executive's high expectations. *Brandweek, 40*(18), 18. Retrieved from http://connection.ebscohost.com/c/articles/1839476/xer-executives-high-expectations

*Educational Leadership Policy Standards: ISLLC 2008* as adopted by the National Policy Board for Educational Administration. (2008). Retrieved from http://www.ccsso.org/documents/2008/educational_leadership_policy_standards_2008.pdf

Elmore, T. (2010). *Generation iY*. Atlanta, GA: Poet Gardner Publishing.

Fernandez, S. (2009). *Comparing generation x to generation y on work-related beliefs* (Doctoral dissertation, San Jose State University). Retrieved from http://www.proquest.com/en-US/

Fry, L. M. (2010). *Baby Boomer and Gen X elementary principals: Differing perspectives on schooling* (Doctoral dissertation). Available from ProQuest. (UMI No. 3421816)

Georgia Department of Education. (n.d.). *School*. Retrieved from http://www.mitchell.k12.ga.us/LinkClick.aspx?fileticket=PG_9MauDqbI%3D&tabid=1111

Georgia Partnership for Excellence in Education. (2010). Education research. Retrieved from anhttp://www.gpee.org/Council.74.0.html

Ginsberg, R., & Thompson, T. (1992). Dilemmas and solutions regarding principal evaluation. *Peabody Journal of Education, 68*(1), 58-74. Retrieved from http://www.jstor.org/stable/i265907

Guthrie, J. W., & Schuermann, P. J. (2010). *Successful school leadership*. Boston, MA: Pearson Education, Inc.

Hargreaves, A., & Fink, D. (2004, April). The seven principles of sustainable leadership. *Learning in Tough Times, 61*, 8-13. Retrieved from http://www.ascd.org/publications/educational-leadership/apr04/vol61/num07/The-Seven-Principles-of-Sustainable-Leadership.aspx.

Hater, J. J., & Bass, B. M. (1988). Superior's evaluations and subordinate's perceptions of transformational and transactional Leadership. *Journal of Applied Psychology, 73*(1), 695-702.

Holleran II, M. J. (2008). *The talent war: Attracting and retaining generation Y leaders in professional services* [White paper]. Retrieved from Society for Marketing Professional Services: http://www.smps.org/foundation/

Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit-performance. *Journal of Applied Psychology, 78*, 891-902. Retrieved from http://psycnet.apa.org/index.cfm?fa=buy.optionToBuy&uid=1994-19634-001

Joiner, T. (2000). Gen X-ers focus on life outside the job fulfillment. *The Secured Lender*. (May/June), 64-68. Retrieved from http://www.highbeam.com/doc/1P3-53786928.html

Jones, L. P. (2010). *Evaluating generational differences regarding corporate loyalty within the manufacturing industry* (Doctoral dissertation, Northcenteral University). Retrieved from http://www.proquest.com/en-US/

Kirby, P. C., Paradise, L., & King, M. (1992). Extraordinary leaders in education: Understanding transformational leadership. *Journal of Educational Research*, *85*(5), 303-311. Retrieved from http://www.jstor.org

Koenigsknecht, S. (2002). *A comparison of the motivational factors of baby boomer and generation x employees* (Doctoral dissertation, Colorado Technical University). Retrieved from http://www.proquest.com/en-US/

Koh, W. L., Steers, R. M., & Terborg, J. R. (1995). The effects of transformational leadership on teacher attitudes and student performance in Singapore. *Journal of Organizational Business*, *16*(4), 319-333. Retrieved from http://www.proquest.com/en-US/

Kouzes, J. M., & Posner, B. Z. (2002). *The leadership practices inventory: Theory and evidence behind the five practices of exemplary leaders.* Retrieved from http://media.wiley.com/assets/61/06/lc_jb_appendix.pdf

Kouzes, J., & Posner, B. (2012). *The leadership challenge* (5th ed.). San Francisco, CA: Jossey-Bass.

Kowske, B., Rasch, R. L., & Wiley, J. W. (2009). *Millennials' (lack of) attitude problem: An empirical examination of generational effects on work attitudes.* Retrieved from http://www.kenexa.com/getattachment/94bb8869-7554-46c7-9a5c-c2ec90f4a4f8/Millennials-Lack-of-Attitude-Problem.aspx

Kupperschmidt, B. R. (2000). Multigeneration employees: Strategies for effective management. *Health Care Manager, 19*(1), 65-76. Retrieved from http://journals.lww.com/healthcaremanagerjournal/Abstract/2000/19010/Multigeneration_Employees__Strategies_for.11.aspx

Lancaster, L. C., & Stillman, D. (2005). *When generations collide*. New York, NY: Harper Collins Publishers Inc.

Leedy, P. D., & Ormrod, J. E. (2001). *Practical research: Planning and design* (7th ed.). Upper Saddle River, N.J: Merrill Prentice Hall.

Liethwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2006). *Successful school leadership: What it is and how it influences pupil learning*. Retrieved from EBSCOHost database: http://www.ncsl.org.uk/media/3F6/2B/What-we-know-about-school-leadership-full-report.pdf.

Longnecker, C. O., & Nykodym, N. (1996, SEP). Public sector performance appraisal effectiveness: A case study. *Public Personnel Management, 25*(2), 151-164.

Mannheim, K. (1952). The problems of generations. *In essays on the sociology of knowledge*. Centerlane, London: Routledge & Kegan LTD. Retrieved from http://ia600302.us.archive.org/15/items/essaysonsociolog00mann/essaysonsociolog00mann.pdf

Marzano, R. J., Waters, T., & McNulty, B. A. (2005). *School leadership that works*. Denver, CO: McREL.

Maxwell, L. (2008). Delaware rolling out new evaluations for principals. *Education Week*, *27*(41), 10. Retrieved from http://ehis.ebscohost.com.proxy.kennesaw.edu/ehost/detail?sid=0271cc4f-318e-4b33-a9c8-6f1310b48745%40sessionmgr15&vid=8&hid=101&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#db=a9h&AN=32708934

McNeese-Smith, D., & Crook, M. (2003). Nursing values and a changing nurse workforce: Values, age, and job stages. *Journal of Nursing Administration*, *33*(5), 260-270. Retrieved from http://ovidsp.tx.ovid.com.proxy.kennesaw.edu/sp-3.8.1a/ovidweb.cgi?WebLinkFrameset=1&S=PLBJFPKEGLDDGJJCNCOKLCMCGOBOAA00&returnUrl=ovidweb.cgi%3f%26TOC%3dS.sh.12305_1365882222_72.12305_1365882222_84.12305_1365882222_88.12305_1365882222_90.12305_1365882222_94.12305_1365882222_98%257c2%257c50%26FORMAT%3dtoc%26FIELDS%3dTOC%26S%3dPLBJFPKEGLDDGJJCNCOKLCMCGOBOAA00&directlink=http%3a%2f%2fgraphics.tx.ovid.com%2fovftpdfs%2fFPDDNCMCLCJCGL00%2ffs025%2fovft%2flive%2fgv015%2f00005110%2f00005110-200305000-

00002.pdf&filename=Nursing+Values+and+a+Changing+Nurse+Workforce%3a+Values%2c+Age%2c+and+Job+Stages.&link_from=S.sh.12305_1365882222_72.12305_1365882222_84.12305_1365882222_88.12305_1365882222_90.12305_1365882222_94.12305_1365882222_98|2&pdf_key=B&pdf_index=S.sh.12305_1365882222_72.12305_1365882222_84.12305_1365882222_88.12305_1365882222_90.12305_1365882222_94.12305_1365882222_98

Michaud, D. A. (2012). *Generational differences in the perception of leadership styles and practices between members of the Society for Public Health Education* (Doctoral dissertation, Capella University). Retrieved from http://www.proquest.com/en-US/

Papp, E. (2007). *Managing Gen Y.* Retrieved from http://www.ericpapp.com/downloads/article-managing-gen-y.pdf

Pendergast, D. (2009). Generational dynamics: Y it matters 2 U and me. *International Journal of Home Economics*, *2*(3), 67-84. Retrieved from http://search.informit.com.au/search;action=doSearch

Perez, B. (2005). *A study of how a leader's use of contingent and non-contingent reward behavior effects the job satisfaction of science and engineering employees at a not-for-profit research organization* (Doctoral dissertation, Our Lady of the Lake University). Retrieved from http://www.proquest.com/en-US/

Pew Research Center. (2006). *Public says American work life is worsening, but most workers remain satisfied with their jobs*. Washington, D.C. Retrieved from http://www.people-press.org/

Pew Research Center. (2010). *Millennials: A portrait of generation next*. Washington, D.C. Retrieved from http://www.pewsocialtrends.org/files/2010/10/millennials-confident-connected-open-to-change.pdf

Piper, L. E. (2008). The generation-y workforce in health care: The new challenge for leadership. *The Health Care Manager*, *27*(2), 98-103. http://dx.doi.org/10.1097/01.HCM.0000285036.04419.ba

Powell, J. (2003). *Generational perceptions of effective leadership* (Doctoral dissertation, Argosy University). Retrieved from http://www.proquest.com/en-US/

Ranstad. (2006). *2006 employee review*. Rochester, NY. Harris Interactive, Inc. Retrieved from www.us.randstad.com

Ranstad. (2008). *2008 world of work*. Rochester, NY. Harris Interactive, Inc. Retrieved from www.randstad.com

Reeves, T. C. (2006). *Do generational differences matter in instructional design?* Athens, GA. Retrieved from http://itforum.coe.uga.edu/Paper104/ReevesITForumJan08.pdf

Riescher, J. G. (2009). *Management across time: A study of generational workforce groups (Baby Boomer and Generation X) and leadership* (Doctoral dissertation, Capella University). Available from ProQuest Dissertations and Theses. (UMI No. 3355469)

Rosow, I. (1978). What is a cohort and why? *Human Development, 21*, 65-75. http://dx.doi.org/10.1159/000271575

Rost, J. (1991). *Leadership for the twenty first century*. New York: Praeger.

Rubin, D. B. (1987). *Multiple imputation for nonresponse in surveys*. New York: John Wiley & Sons, Inc.

Ryder, N. B. (1965). The cohort as a concept in the study of social change. *American Sociological Review*, *30*(6), 843-861. Retrieved from http://www.soc.washington.edu/users/brines/ryder.pdf

Statistical Analysis Software (SAS). (2013). http://www.sas.com/technologies/analytics/statistics/stat/

Salopek, J. J. (2006). Leadership for a new age. *Training & Development*, *60*(6), 22-23. Retrieved from http://proxy.kennesaw.edu/login?url=http://search.proquest.com.proxy.kennesaw.edu/docview/227029938?accountid=11824

Schlesinger Jr., A. M. (1986). *The cycles of American history*. Boston, MA: Houghton Mifflin.

School Improvement Opinion Survey. (2006). *School Keys: Unlocking excellence through the Georgia school standards*. Retrieved from http://archives.doe.k12.ga.us/DMGetDocument.aspx/GAPSS%20FINAL%20Rev%20PRINT%20READY%208-6-08.pdf?p=6CC6799F8C1371F629970641DAA1DDE3ED496B145857D4450887CCABED6ACE36&Type=D

Sergiovanni, T. J. (2007). *Rethinking leadership: A collection of articles* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Sessa, V. I., Kabacoff, R. I., Deal, J., & Brown, H. (2007). Generational differences in leader values and leadership behaviors. *Psychologist-Manager Journal*, *10*(1), 47-

74. Retrieved from http://ehis.ebscohost.com.proxy.kennesaw.edu/ehost/pdfviewer/pdfviewer?vid=3&sid=eb2be0dd-5446-4f1d-8d2a-b1efbf438757%40sessionmgr115&hid=101

Shaw, A. (2009). *What is 21st century education?* Austin, TX. Retrieved from http://www.21stcenturyschools.com/What_is_21st_Century_Education.htm

Smola, K. W., & Sutton, C. D. (2002). Generational differences: Revisiting generational work values for the new millennium. *Journal of Organizational Behavior, 23*, 363-382. http://dx.doi.org/10.1002/job.147

Spillane, J. P. (2006). *Distributed leadership*. San Francisco, CA: John Wiley & Sons, Inc.

Strauss, W., & Howe, N. (1991). *Generations: The history of America's future, 1584 to 2069* (1st ed.). New York, NY: William Morrow 7 Company Inc.

Stronge, J. (2012). *Stronge Leader Effectiveness Performance Evaluation System*. Trenton, NJ. New Jersey Education Association. Retrieved from http://www.strongeandassociates.com/files/Stronge%20Evaluation%20System%20Report.pdf.

Stronge, J. H., Richard, H. B., & Catano, N. (2008). *Qualities of effective principals*. Alexandria, VA: Association for Supervision and Curriculum Development.

Studebaker, G. L. (2000). *A comparative study of Indiana superintendent's perceptions of principal evaluation instruments* (Doctoral dissertation, Indiana State University). Available from ProQuest Dissertations and Theses.

Suckert, M. W. (2008). *Generational differences in values among Minnesota K--12 educational leaders* (Doctoral dissertation, University of North Dakota). Retrieved from http://www.proquest.com/en-US/

Summers, A. L. (2011). *A theoretical analysis of leadership style preferences among millennial generation company-grade army officers* (Doctoral dissertation, University of Maryland University College). Retrieved from http://www.proquest.com/en-US/

Tolbize, A. (2008). *Generational differences in the workplace*. Retrieved from http://rtc.umn.edu/docs/2_18_Gen_diff_workplace.pdf

Tschannen-Moran, M. (2004). *Trust matters: Leadership for successful schools*. San Francisco, CA: Jossey-Bass.

United States Census Bureau. (n.d.). *Census.* American FactFinder fact sheet. Retrieved from http://www.census.gov/#

Yu, H., & Miller, P. (2005). Leadership style: The X Generation and Baby Boomers compared in different cultural contexts. *Leadership & Organization Development Journal, 26*(1), 35-50.

Wallace, J. (2006). Work commitment in the legal profession: A study of baby boomers and generation xers. *International Journal of the Legal Profession*, *13*(2), 137-152. http://dx.doi.org/10.1080/09695950600961293

Welsh, R. (2010). *Leadership styles of a multigenerational leader* (Doctoral dissertation, Capella University). Retrieved from http://www.proquest.com/en-US/

Zemke, R., Raines, C., & Filipczak, B. (2000). *Generations at work*. New York, NY: AMA Publications.

## Appendix A

School Improvement Opinion Survey

Scale: (1) Consistently, (2) Often, (3) Infrequently, (4) Never, (5) No Basis to Judge Assessment

1. We use a comprehensive system for assessing student progress toward meeting the CCGPS.
2. Based on learning gaps and problems identified through assessment data, instruction is adjusted to improve overall and individual student achievement.
3. Teachers collaborate to design assessments aligned to the CCGPS.
4. Diagnostic assessments are used to adjust instruction to accommodate students' readiness levels.
5. Teachers use a variety of formative assessments to monitor student progress and adjust instruction.
6. Collaboration on data analysis guides and informs grade-level and school-wide decision making.
7. Teachers use a variety of summative assessment tasks to evaluate student achievement of CCGPS.
8. Our students' ability to self-monitor and self-evaluate is enhanced through the use of variety of assessments.
9. Assessment data are used to plan and adjust instruction for each student, subgroup of students, and the school as a whole.

Curriculum

10. Our written curriculum documents are aligned with CCGPS and are used to guide instruction.
11. Our curriculum has been aligned horizontally and vertically in order to support students' mastery of the CCGPS standards.
12. Our curriculum maps and units are designed to ensure all students participate in a curriculum that requires depth of understanding and rigor.
13. Our teachers have a shared understanding of what students are expected to know, do, and understand at all grade levels and in all subject areas.
14. We meet to collaborate on the design and implementation of the curriculum.
15. Our teachers analyze student work collaboratively to build consensus for a common understanding of proficiency and rigor.
16. Administrators and teacher leaders monitor and evaluate implementation of the curriculum through a consistent and systematic school wide process.
17. Performance data and the review of student work are used to revise curriculum implementation and to align resources.

Instruction

18. An organizing framework that aligns curriculum, assessment, and instruction is utilized to plan quality teaching and learning.
19. Teachers plan together to design, monitor, and revise instruction.
20. Learning goals are aligned with CCGPS.
21. Learning goals are explicitly communicated to our students.
22. Teachers use a variety of research-based instructional strategies.

23. Teachers emphasize and encourage learners to use higher-order thinking skills and mental habits of mind.
24. Differentiated instruction, adjustment of content, product, process and/or learning environment, is provided to support students according to their instructional needs.
25. We utilize flexible grouping based on ongoing diagnosis and formative assessment to enhance student learning.
26. Systematic and data-driven interventions are required for our students who need additional assistance to master standards.
27. Technology is effectively utilized to maximize student learning.
28. Our students are engaged in work that is authentic standards-driven and requires higher-order reasoning.
29. Teachers and students work collaboratively to establish high expectations and challenging learning goals.
30. Students identify and apply evaluation criteria and monitor achievement of those criteria utilizing such tools as benchmarks, work, rubrics, anchor papers, scoring guides, and evaluation checklists.

Leadership

31. Our principal and other school administrators exhibit a deep understanding of curriculum, assessment, and instruction.
32. Our principal and other school administrators are actively involved in the learning community, including serving as active members on study teams and promoting meaningful professional learning.

33. Our principal and other school administrators keep the school focused on student learning and promote sustained and continuous improvement.
34. Our principal and other school administrators utilize multiple types of data to drive and monitor school-wide instructional decisions.
35. Our principal and other school administrators implement policies, practices, and procedures that ensure a safe and orderly learning environment.
36. Our principal and other school administrators maximize the availability and distribution of instructional resources focused on school learning goals.
37. Our principal and other school administrators are visible to staff, students, and parents and participate in subject and/or grade level meetings.
38. Our principal and other school administrators collaborate with staff members and other stakeholders to elicit input and provide opportunities for shared decision-making and problem-solving.
39. Staff members have opportunities to serve in a variety of leadership roles.
40. Our school receives help from outside agencies like Metro RESA, colleges, businesses and the Georgia Department of Education.
41. Our school has a fully operational Leadership Team that is representative of our entire staff. The team conducts regular, results-driven meetings and exists to address student achievement and overall academic success.
42. Our Leadership Team has a system for handling business, making decisions, and solving problems.
43. Our Leadership Team uses current data to identify student achievement needs.
44. Our Leadership Team uses current data to identify school performance needs.

Planning and Organization

45. Our schools' vision and mission guides and informs our continuous school improvement process.
46. Our school improvement plan was created with staff input.
47. Our administrators and the School Leadership Team monitor the implementation of the school improvement plan and its impact upon student achievement.
48. Our school goals are aligned with district goals.
49. Human, technological, and material resources are effectively selected and used to ensure the academic success of all learners.
50. A safe learning environment is planned, implemented, and maintained by our school staff and administrators.
51. Instructional time is maximized, and no interruptions occur to detract from time on learning.
52. Our school facility is adequately maintained, clean, and conducive for teaching and learning.

Professional Learning

53. Teachers and administrators participate in job-embedded professional learning and collaboration addressing curriculum, assessment, instruction, and technology.
54. The principal and other school leaders set clear expectations and monitor the effectiveness of professional learning on teacher practices and student learning.
55. Opportunities exist for teachers in our school to participate in instructional leadership development.
56. The principal and other leaders utilize data to plan for professional learning.

57. The professional learning activities at my school are connected to our school improvement goals.
58. Teams meet to review and study current research to make informed instructional decisions.
59. The staff participates in long-term in-depth professional learning which is aligned with our school improvement goals.
60. Teachers and administrators have the knowledge and skills necessary to collaborate.
61. Our professional learning prepares us in practices that convey respect for diverse cultural backgrounds and high expectations for all students.
62. Our professional learning prepares teachers to adjust instruction and assessment to meet the needs of diverse learners.
63. Our teachers participate in professional learning to deepen their content knowledge.
64. Our professional learning designs are purposeful and are aligned with specific individual group needs.
65. Professional learning in our school provides opportunities for teachers and administrators to learn how to involve families in their children's education.

School- Family- Community

66. Opportunities for communication exist in both directions between the home and school.
67. Opportunities exist for parents to participate in training and informational sessions to enhance student performance.

68. Parents feel welcome in our school.
69. Opportunities exist for parents and community members to participate in school governance, decision making, and problem solving.
70. School and community partnerships exist to provide a network of support for our students.

School Culture

71. Our school provides support to promote the academic achievement of all learners.
72. Our school supports and enhances the social and emotional growth and development of all learners.
73. School policies, practices, and experiences promote respect for individual differences.
74. Our school celebrates the achievement and accomplishments of our students, staff, and school community.
75. Our school culture reflects an atmosphere of trust and openness among all stakeholders.

## Appendix B

Principal Letter

To: Principal
High School
From: Greg Doss
Date: April 25, 2013
Subject: Research Approval Request

Dear Principal,

I am a doctoral student of the Department of Educational Leadership at Kennesaw State University. The purpose of this correspondence is to request your assistance with a research project I am completing.

The goal of the study is to develop an understanding of the generational perspective of teachers' perception of organizational culture and principal effectiveness. It is intended that the findings of the study will be useful in understanding organizational culture.

I will be using the existing data from the 2012-2013 School Improvement Opinion Survey. The data retrieved will include teacher and administrative responses to the dimensions of school culture and leadership from the high schools in the school district. I am formally requesting your permission to utilize the existing data from your school as part of this research project. The data collection will not involve, impede, or interfere with the daily operation of your school, teachers, or administrators. All response will remain confidential, with neither the school name, principal name, or teacher names being revealed in any way.

I hope you will give me permission to include your school in my study. I appreciate your time and consideration for my request.

In compliance with the rules and regulations for conducting research in the district please sign and return the enclosed 'Agreement to Participate' and self-addressed stamped envelope.

Please do not hesitate to contact me if you require any additional information.

Sincerely,

Greg Doss

## Appendix C

Principal Letter Second Request

To: Principal
High School
Date: May 13, 2013
Subject: Research Approval Request

From: Greg Doss

Dear Principal,

Two weeks ago a research approval request package was mailed to you. If you have already processed the request, please accept my sincere appreciation for your participation. If by some chance you did not receive it or it was misplaced I have included another package for your convenience.

Sincerely,

Greg Doss

# Appendix D

## Teacher Perceptions of Boomer Principals

Table D1

*Dimensions Analysis of Variance of Teacher Perceptions of Boomers Principals*

| Dimension | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| Assessment | Cohorts | .49 | 2 | .24 | 1.20 | .31 |
| | Error | 102.44 | 499 | .21 | | |
| | Total | 102.93 | 501 | | | |
| Curriculum | Cohorts | .67 | 2 | .34 | 1.54 | .22 |
| | Error | 109.08 | 499 | .22 | | |
| | Total | 109.75 | 502 | | | |
| Instruction | Cohorts | .72 | 2 | .36 | 1.59 | .21 |
| | Error | 112.81 | 499 | .23 | | |
| | Total | 113.53 | 501 | | | |
| Leadership | Cohorts | .59 | 2 | .30 | 1.15 | .32 |
| | Error | 128.96 | 499 | .26 | | |
| | Total | 129.55 | 501 | | | |
| Planning and Organization | Cohorts | 1.01 | 2 | .51 | 1.95 | .14 |
| | Error | 129.62 | 499 | .26 | | |
| | Total | 130.63 | 501 | | | |
| Professional Learning | Cohorts | 1.32 | 2 | .66 | 2.36 | .10 |
| | Error | 139.49 | 499 | .28 | | |
| | Total | 140.81 | 501 | | | |
| School-Family-Community | Cohorts | 2.34 | 2 | 1.17 | 4.06 | **.02** |
| | Error | 143.74 | 499 | .29 | | |
| | Total | 146.08 | 501 | | | |
| School Culture | Cohorts | 1.70 | 2 | .85 | 3.09 | **.05** |
| | Error | 137.32 | 499 | .28 | | |
| | Total | 139.02 | 501 | | | |

*Note.* MS = mean square.

Table D2

*School- Family- Community Analysis of Variance of Teacher Perceptions of Boomers Principals*

| Item | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| 66. Opportunities for communication exist in both directions between the home and school. | Cohorts | 3.66 | 2 | 1.81 | 3.97 | **.02** |
| | Error | 299.79 | 499 | .46 | | |
| | Total | 233.45 | 501 | | | |
| 67. Opportunities exist for parents to participate in training and informational sessions to enhance student performance. | Cohorts | 3.44 | 2 | 1.72 | 4.24 | **.01** |
| | Error | 202.06 | 499 | .40 | | |
| | Total | 205.50 | 501 | | | |
| 68. Parents feel welcome in our school. | Cohorts | 1.81 | 2 | .91 | 1.87 | .16 |
| | Error | 241.53 | 499 | .48 | | |
| | Total | 243.33 | 501 | | | |
| 69. Opportunities exist for parents and community members to participate in school governance, decision making, and problem solving. | Cohorts | 3.55 | 2 | 1.78 | 5.18 | **.01** |
| | Error | 171.30 | 499 | .34 | | |
| | Total | 174.85 | 501 | | | |
| 70. School and community partnerships exist to provide a network of support for our students. | Cohorts | .81 | 2 | .41 | .70 | .50 |
| | Error | 289.42 | 499 | .58 | | |
| | Total | 290.23 | 501 | | | |

*Note.* MS = mean square.

Table D3

*School- Family- Community Teacher Mean Differences of Boomer Principals*

| Item | Generational Cohort | | MD | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|
| 66. Opportunities for communication exist in both directions between the home and school. | Gen X | Millennials | -.12 | 3.97 | **.02** |
| | Boomers* | Millennials | **-.24** | | |
| | Boomers | Gen X | -.13 | | |
| 67. Opportunities exist for parents to participate in training and informational sessions to enhance student performance. | Gen X* | Millennials | **-.18** | 4.24 | **.01** |
| | Boomers* | Millennials | **-.24** | | |
| | Boomers | Gen X | -.05 | | |
| 68. Parents feel welcome in our school. | Gen X | Millennials | -.07 | 1.87 | .16 |
| | Boomers | Millennials | -.17 | | |
| | Boomers | Gen X | -.10 | | |
| 69. Opportunities exist for parents and community members to participate in school governance, decision making, and problem solving. | Gen X | Millennials | -.05 | 5.18 | .01 |
| | Boomers* | Millennials | **-.21** | | |
| | Boomers* | Gen X | **-.16** | | |
| 70. School and community partnerships exist to provide a network of support for our students. | Gen X | Millennials | -.06 | .70 | .50 |
| | Boomers | Millennials | | -.12 | |
| | Boomers | Gen X | | -.05 | |

*Note.* MD = mean difference. * Statistically significantly lower mean score.

Table D4

*School Culture Analysis of Variance of Generational Teacher Perceptions of Boomers Principals*

| Item | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| 71. Our school provides support to promote the academic achievement of all learners. | Cohorts | 2.99 | 2 | 1.49 | 2.99 | **.05** |
| | Error | 249.30 | 499 | .50 | | |
| | Total | 252.29 | 501 | | | |
| 72. Our school supports and enhances the social and emotional growth and development of all learners. | Cohorts | .40 | 2 | .20 | .66 | .52 |
| | Error | 150.69 | 499 | .30 | | |
| | Total | 151.09 | 501 | | | |
| 73. School policies, practices, and experiences promote respect for individual differences. | Cohorts | 3.44 | 2 | 1.72 | 3.49 | **.03** |
| | Error | 246.25 | 499 | .49 | | |
| | Total | 249.69 | 501 | | | |
| 74. Our school celebrates the achievement and accomplishments of our students, staff, and school community. | Cohorts | 1.09 | 2 | .54 | 1.58 | .21 |
| | Error | 172.41 | 499 | .35 | | |
| | Total | 173.50 | 501 | | | |
| 75. Our school culture reflects an atmosphere of trust and openness among all stakeholders. | Cohorts | 2.69 | 2 | 1.34 | 2.79 | .06 |
| | Error | 240.77 | 499 | .48 | | |
| | Total | 243.46 | 501 | | | |

*Note.* MS = mean square.

Table D5

*School Culture Teacher Mean Differences of Boomer Principals*

| Item | Generational Cohort | | MD | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|
| 71. Our school provides support to promote the academic achievement of all learners. | Gen X | Millennials | -.17 | 2.99 | **.05** |
| | Boomers* | Millennials | **-.22** | | |
| | Boomers | Gen X | -.05 | | |
| 73. School policies, practices, and experiences promote respect for individual differences. | Gen X | Millennials | -.01 | 3.49 | **.03** |
| | Boomers | Millennials | -.18 | | |
| | Boomers* | Gen X | **-.18** | | |

*Note.* MD = mean difference. * Statistically significantly lower mean score.

# Appendix E

## Teacher Perceptions of Gen X Principals

Table E1

*Dimension Analysis of Variance of Teacher Perceptions of Gen X Principals*

| Dimension | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| Assessment | Cohorts | 1.45 | 2 | .72 | 3.75 | **.02** |
| | Error | 113.54 | 590 | .19 | | |
| | Total | 114.99 | 592 | | | |
| Curriculum | Cohorts | 2.00 | 2 | 1.00 | 4.45 | **.01** |
| | Error | 132.59 | 590 | .22 | | |
| | Total | 134.59 | 592 | | | |
| Instruction | Cohorts | 2.95 | 2 | 1.48 | 6.51 | **.002** |
| | Error | 133.69 | 590 | .23 | | |
| | Total | 136.64 | 592 | | | |
| Leadership | Cohorts | 2.90 | 2 | 1.45 | 5.96 | **.003** |
| | Error | 143.64 | 590 | .24 | | |
| | Total | 146.54 | 592 | | | |
| Planning and Organization | Cohorts | 2.03 | 2 | 1.01 | 4.03 | **.02** |
| | Error | 148.07 | 590 | .25 | | |
| | Total | 150.10 | 592 | | | |
| Professional Learning | Cohorts | 2.49 | 2 | 1.24 | 4.65 | **.01** |
| | Error | 157.76 | 590 | .27 | | |
| | Total | 160.25 | 592 | | | |
| School-Family-Community | Cohorts | 1.44 | 2 | .72 | 2.39 | .09 |
| | Error | 178.27 | 590 | .30 | | |
| | Total | 179.71 | 592 | | | |
| School Culture | Cohorts | 2.17 | 2 | 1.08 | 3.96 | **.02** |
| | Error | 161.77 | 590 | .27 | | |
| | Total | 163.94 | 592 | | | |

*Note.* MS = mean square.

Table E2

*Assessment Analysis of Variance of Teacher Perceptions of Gen X Principals*

| Item | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| 1. We use a comprehensive system for assessing student progress toward meeting the CCGPS. | Cohorts | .16 | 2 | .08 | .41 | .67 |
| | Error | 115.76 | 590 | .20 | | |
| | Total | 115.92 | 592 | | | |
| 2. Based on learning gaps and problems identified through assessment data, instruction is adjusted to improve overall and individual student achievement. | Cohorts | 1.38 | 2 | .69 | 1.63 | .20 |
| | Error | 248.87 | 590 | .42 | | |
| | Total | 250.25 | 592 | | | |
| 3. Teachers collaborate to design assessments aligned to the CCGPS. | Cohorts | 1.26 | 2 | .63 | 1.92 | .15 |
| | Error | 192.60 | 590 | .33 | | |
| | Total | 193.86 | 592 | | | |
| 4. Diagnostic assessments are used to adjust instruction to accommodate students' readiness levels. | Cohorts | 2.21 | 2 | 1.10 | 3.23 | **.04** |
| | Error | 201.99 | 590 | .34 | | |
| | Total | 204.20 | 592 | | | |
| 5. Teachers use a variety of formative assessments to monitor student progress and adjust instruction. | Cohorts | 2.59 | 2 | 1.29 | 3.55 | **.03** |
| | Error | 215.08 | 590 | .36 | | |
| | Total | 217.67 | 592 | | | |

(Table continues)

| | | | | | | |
|---|---|---|---|---|---|---|
| 6. Collaboration on data analysis guides and informs grade-level and school-wide decision making. | Cohorts | 2.49 | 2 | 1.24 | 3.23 | **.04** |
| | Error | 227.71 | 590 | .39 | | |
| | Total | 230.20 | 592 | | | |
| 7. Teachers use a variety of summative assessment tasks to evaluate student achievement of CCGPS. | Cohorts | 3.10 | 2 | 1.55 | 3.18 | **.04** |
| | Error | 288.18 | 590 | .49 | | |
| | Total | 291.28 | 592 | | | |
| 8. Our students' ability to self-monitor and self-evaluate is enhanced through the use of variety of assessments. | Cohorts | 1.15 | 2 | .58 | 1.50 | .22 |
| | Error | 227.09 | 590 | .38 | | |
| | Total | 228.24 | 592 | | | |
| 9. Assessment data are used to plan and adjust instruction for each student, subgroup of students, and the school as a whole. | Cohorts | 1.96 | 2 | .98 | 2.74 | .07 |
| | Error | 211.24 | 590 | .36 | | |
| | Total | 213.20 | 592 | | | |

*Note.* MS = mean square.

Table E3

*Assessment Teacher Mean Differences of Gen X Principals*

| Item | Generational Cohort | | MD | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|
| 4. Diagnostic assessments are used to adjust instruction to accommodate students' readiness levels. | Gen X | Millennials* | **.16** | 3.23 | **.04** |
| | Boomers | Millennials | .06 | | |
| | Boomers | Gen X | -.10 | | |
| 5. Teachers use a variety of formative assessments to monitor student progress and adjust instruction. | Gen X | Millennials* | **.18** | 3.55 | **.03** |
| | Boomers | Millennials | .11 | | |
| | Boomers | Gen X | -.08 | | |
| 6. Collaboration on data analysis Guides and informs grade-level And school-wide decision making. | Gen X | Millennials* | **.18** | 3.23 | **.04** |
| | Boomers | Millennials | .16 | | |
| | Boomers | Gen X | -.02 | | |
| 7. Teachers use a variety of Summative assessment tasks to evaluate student achievement of CCGPS. | Gen X | Millennials* | **.20** | 3.18 | **.04** |
| | Boomers | Millennials | .17 | | |
| | Boomers | Gen X | -.03 | | |

*Note.* MD = mean difference. * Statistically significantly lower mean score.

Table E4

*Curriculum Analysis of Variance of Teacher Perceptions of Gen X Principals*

| Item | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| 10. Our written curriculum documents are aligned with CCGPS and are used to guide Instruction. | Cohorts | 1.47 | 2 | .73 | 1.67 | .19 |
| | Error | 259.02 | 590 | .44 | | |
| | Total | 260.49 | 592 | | | |
| 11. Our curriculum has been aligned horizontally and vertically in order to support students' mastery of the CCGPS standards. | Cohorts | 1.44 | 2 | .72 | 1.88 | .15 |
| | Error | 226.19 | 590 | .38 | | |
| | Total | 227.63 | 592 | | | |
| 12. Our curriculum maps and units are designed to ensure all students participate in a curriculum that requires depth of understanding and rigor. | Cohorts | 3.10 | 2 | 1.55 | 3.37 | **.03** |
| | Error | 271.58 | 590 | .46 | | |
| | Total | 274.68 | 592 | | | |
| 13. Our teachers have a shared understanding of what students are expected to know, do, and understand at all grade levels and in all subject areas. | Cohorts | 1.65 | 2 | .82 | 2.00 | .14 |
| | Error | 242.82 | 590 | .41 | | |
| | Total | 244.47 | 592 | | | |
| 14. We meet to collaborate on the design and implementation of the curriculum. | Cohorts | 3.05 | 2 | 1.52 | 2.79 | .06 |
| | Error | 321.33 | 590 | .54 | | |
| | Total | 324.38 | 592 | | | |

(Table continues)

| | | | | | | |
|---|---|---|---|---|---|---|
| 15. Our teachers analyze student work collaboratively to build consensus for a common understanding of proficiency and rigor. | Cohorts | 3.32 | 2 | 1.66 | 3.65 | **.03** |
| | Error | 268.35 | 590 | .45 | | |
| | Total | 271.67 | 592 | | | |
| 16. Administrators and teacher leaders monitor and evaluate implementation of the curriculum through a consistent and systematic school wide process. | Cohorts | 1.76 | 2 | .88 | 2.29 | .10 |
| | Error | 226.30 | 590 | .38 | | |
| | Total | 228.06 | 592 | | | |
| 17. Performance data and the review of student work are used to revise curriculum implementation and to align resources. | Cohorts | 2.16 | 2 | 1.08 | 3.39 | **.03** |
| | Error | 187.71 | 590 | .32 | | |
| | Total | 189.87 | 592 | | | |

*Note.* MS = mean square.

Table E5

*Curriculum Teacher Mean Differences of Gen X Principals*

| Item | Generational Cohort | | MD | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|
| 12. Our curriculum maps and units are designed to ensure all students participate in a curriculum that requires depth of understanding and rigor. | Gen X | Millennials* | **.20** | 3.37 | **.03** |
| | Boomers | Millennials | .16 | | |
| | Boomers | Gen X | -.05 | | |
| 14. We meet to collaborate on the design and implementation of the curriculum. | Gen X | Millennials | .15 | 2.79 | .06 |
| | Boomers | Millennials | .02 | | |
| | Boomers | Gen X | -.14 | | |
| 15. Our teachers analyze student work collaboratively to build consensus for a common understanding of proficiency and rigor. | Gen X | Millennials* | **.20** | 3.65 | **.03** |
| | Boomers | Millennials | .09 | | |
| | Boomers | Gen X | -.11 | | |
| 17. Performance data and the review of student work are used to revise curriculum implementation and to align resources. | Gen X | Millennials* | **.17** | 3.39 | **.03** |
| | Boomers | Millennials | .10 | | |
| | Boomers | Gen X | -.07 | | |

*Note.* MD = mean difference. * Statistically significantly lower mean score.

Table E6

*Instruction Analysis of Variance of Teacher Perceptions of Gen X Principals*

| Item | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| 18. An organizing framework that aligns curriculum, assessment, and instruction is utilized to plan quality teaching and learning. | Cohorts | 4.41 | 2 | 2.21 | 5.81 | **.003** |
| | Error | 223.83 | 590 | .38 | | |
| | Total | 228.24 | 592 | | | |
| 19. Teachers plan together to design, monitor, and revise instruction. | Cohorts | 1.45 | 2 | .73 | 2.20 | .11 |
| | Error | 194.70 | 590 | .33 | | |
| | Total | 196.15 | 592 | | | |
| 20. Learning goals are aligned with CCGPS. | Cohorts | 1.00 | 2 | .50 | 1.36 | .26 |
| | Error | 216.32 | 590 | .37 | | |
| | Total | 217.32 | 592 | | | |
| 21. Learning goals are explicitly communicated to our students. | Cohorts | 5.07 | 2 | 2.53 | 5.70 | **.003** |
| | Error | 261.97 | 590 | .44 | | |
| | Total | 267.04 | 592 | | | |
| 22. Teachers use a variety of research-based instructional strategies. | Cohorts | 8.00 | 2 | 4.00 | 7.32 | **.001** |
| | Error | 322.22 | 590 | .55 | | |
| | Total | 330.22 | 592 | | | |
| 23. Teachers emphasize and encourage learners to use higher-order thinking skills and mental habits of mind. | Cohorts | 1.52 | 2 | .76 | 2.02 | .13 |
| | Error | 221.55 | 590 | .38 | | |
| | Total | 223.07 | 592 | | | |

(Table continues)

| | | | | | | |
|---|---|---|---|---|---|---|
| 24. Differentiated instruction, adjustment of content, product, process and/or learning environment, is provided to support students according to their instructional needs. | Cohorts | 3.58 | 2 | 1.79 | 3.28 | **.04** |
| | Error | 322.01 | 590 | .55 | | |
| | Total | 325.59 | 592 | | | |
| 25. We utilize flexible grouping based on ongoing diagnosis and formative assessment to enhance student learning. | Cohorts | 1.91 | 2 | .96 | 2.42 | .09 |
| | Error | 233.06 | 590 | .40 | | |
| | Total | 234.97 | 592 | | | |
| 26. Systematic and data-driven interventions are required for our students who need additional assistance to master standards. | Cohorts | 2.14 | 2 | 1.07 | 2.26 | .11 |
| | Error | 279.33 | 590 | .47 | | |
| | Total | 281.47 | 592 | | | |
| 27. Technology is effectively utilized to maximize student learning. | Cohorts | 2.73 | 2 | 1.37 | 3.20 | **.04** |
| | Error | 251.35 | 590 | .43 | | |
| | Total | 254.08 | 592 | | | |
| 28. Our students are engaged in work that is authentic, standards-driven and requires higher-order reasoning. | Cohorts | 4.42 | 2 | 2.21 | 4.31 | **.01** |
| | Error | 302.39 | 590 | .51 | | |
| | Total | 306.81 | | 592 | | |
| 29. Teachers and students work collaboratively to establish high expectations and challenging learning goals. | Cohorts | 3.85 | 2 | 1.92 | 4.77 | **.01** |
| | Error | 237.62 | 590 | .40 | | |
| | Total | 241.47 | 592 | | | |

(Table continues)

| | | | | | |
|---|---|---|---|---|---|
| 30. Students identify and apply evaluation criteria and monitor achievement of those criteria utilizing such tools as benchmark, work, rubrics, anchor papers, scoring guides, and evaluation checklists. | Cohorts | 5.44 | 2 | 2.72 | 4.43 | **.01** |
| | Error | 361.83 | 590 | .61 | | |
| | Total | 367.27 | 592 | | | |

*Note.* MS = mean square.

Table E7

*Instruction Teacher Mean Differences of Gen X Principals*

| Item | Generational Cohort | | MD | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|
| 18. An organizing framework that aligns curriculum, assessment, and instruction is utilized to plan quality teaching and learning. | Gen X | Millennials* | **.22** | 5.81 | **.003** |
| | Boomers | Millennials | .09 | | |
| | Boomers | Gen X | -.13 | | |
| 21. Learning goals are explicitly communicated to our students. | Gen X | Millennials* | **.26** | 5.70 | **.003** |
| | Boomers | Millennials* | **.19** | | |
| | Boomers | Gen X | -.07 | | |
| 22. Teachers use a variety of research-based instructional strategies. | Gen X | Millennials* | **.32** | 7.32 | **.001** |
| | Boomers | Millennials* | **.28** | | |
| | Boomers | Gen X | -.04 | | |
| 24. Differentiated instruction, adjustment of content, product, process and/or learning environment, is provided to support students according to their instructional needs. | Gen X | Millennials* | **.22** | 3.28 | **.04** |
| | Boomers | Millennials | .13 | | |
| | Boomers | Gen X | -.08 | | |

(Table continues)

| | | | | | |
|---|---|---|---|---|---|
| 27. Technology is effectively utilized to maximize student learning. | Gen X | Millennials | .16 | 3.20 | **.04** |
| | Boomers | Millennials* | **.19** | | |
| | Boomers | Gen X | .03 | | |
| 28. Our students are engaged in work that is authentic, standards-driven and requires higher-order reasoning. | Gen X | Millennials* | **.22** | 4.31 | **.01** |
| | Boomers | Millennials* | **.23** | | |
| | Boomers | Gen X | .01 | | |
| 29. Teachers and students work collaboratively to establish high expectations and challenging learning goals. | Gen X | Millennials* | **.22** | 4.77 | **.01** |
| | Boomers | Millennials | .14 | | |
| | Boomers | Gen X | -.09 | | |
| 30. Students identify and apply evaluation criteria and monitor achievement of those criteria utilizing such tools as benchmark, work, rubrics, anchor papers, scoring guides, and evaluation checklists. | Gen X | Millennials* | **.27** | 4.43 | **.01** |
| | Boomers | Millennials | .20 | | |
| | Boomers | Gen X | -.06 | | |

*Note.* MD = mean difference. * Statistically significantly lower mean score.

Table E8

*Leadership Analysis of Variance of Teacher Perceptions of Gen X Principals*

| Item | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| 31. Our principal and other school administrators exhibit a deep understanding of curriculum, assessment, and instruction. | Cohorts | 2.49 | 2 | 1.25 | 2.67 | .07 |
| | Error | 274.99 | 590 | .47 | | |
| | Total | 277.48 | 592 | | | |
| 32. Our principal and other school administrators are actively involved in the learning community, including serving as active members on study teams and promoting meaningful professional learning. | Cohorts | .96 | 2 | .48 | 1.13 | .32 |
| | Error | 250.83 | 590 | .43 | | |
| | Total | 251.79 | 592 | | | |
| 33. Our principal and other school administrators keep the school focused on student learning and promote sustained and continuous improvement. | Cohorts | 1.05 | 2 | 1.05 | 1.71 | .18 |
| | Error | 180.55 | 590 | .31 | | |
| | Total | 181.60 | 592 | | | |
| 34. Our principal and other school administrators utilize multiple types of data to drive and monitor school-wide instructional decisions. | Cohorts | 2.90 | 2 | 1.45 | 1.96 | .14 |
| | Error | 436.62 | 590 | .74 | | |
| | Total | 439.52 | 592 | | | |

(Table continues)

| | | | | | | |
|---|---|---|---|---|---|---|
| 35. Our principal and other school administrators implement policies, practices, and procedures that ensure a safe and orderly learning environment. | Cohorts | 3.11 | 2 | 1.56 | 3.55 | **.03** |
| | Error | 258.56 | 590 | .44 | | |
| | Total | 261.67 | 592 | | | |
| 36. Our principal and other school administrators maximize the availability and distribution of instructional resources focused on school learning goals. | Cohorts | .61 | 2 | .30 | .76 | .47 |
| | Error | 237.29 | 590 | .40 | | |
| | Total | 237.90 | 592 | | | |
| 37. Our principal and other school administrators are visible to staff, students, and parents and participate in subject and/or grade level meetings. | Cohorts | 3.92 | 2 | 1.96 | 2.91 | .06 |
| | Error | 397.79 | 590 | .67 | | |
| | Total | 401.71 | 592 | | | |
| 38. Our principal and other school administrators collaborate with staff members and other stakeholders to elicit input and provide opportunities for shared decision-making and problem-solving. | Cohorts | 3.97 | 2 | 1.98 | 3.63 | **.03** |
| | Error | 322.84 | 590 | .55 | | |
| | Total | 326.81 | 592 | | | |
| 39. Staff members have opportunities to serve in a variety of leadership roles. | Cohorts | 9.11 | 2 | 4.55 | 6.82 | **.001** |
| | Error | 394.37 | 590 | .67 | | |
| | Total | 403.48 | 592 | | | |

(Table continues)

| | | | | | | |
|---|---|---|---|---|---|---|
| 40. Our school receives help from outside agencies like Metro RESA, colleges, businesses and the Ga. Dept. of Education. | Cohorts | 11.20 | 2 | 5.60 | 9.57 | **<.0001** |
| | Error | 345.26 | 590 | .59 | | |
| | Total | 356.46 | 592 | | | |
| 41. Our school has a fully operational Leadership Team that is representative of our entire staff. The team conducts regular, results-driven meetings and exists to address student achievement and overall academic success. | Cohorts | 2.28 | 2 | 1.14 | 3.38 | **.03** |
| | Error | 198.96 | 590 | .34 | | |
| | Total | 201.24 | 592 | | | |
| 42. Our Leadership Team has a system for handling business, making decisions, and solving problems. | Cohorts | 2.72 | 2 | 1.36 | 3.20 | **.04** |
| | Error | 250.44 | 590 | .42 | | |
| | Total | 253.16 | 592 | | | |
| 43. Our Leadership Team uses current data to identify student achievement needs. | Cohorts | .21 | 2 | .10 | .46 | .63 |
| | Error | 133.99 | 590 | .23 | | |
| | Total | 134.20 | 592 | | | |
| 44. Our Leadership Team uses current data to identify school performance needs. | Cohorts | 8.28 | 2 | 4.14 | 4.52 | **.01** |
| | Error | 529.31 | 590 | .90 | | |
| | Total | 537.59 | 592 | | | |

*Note.* MS = mean square.

Table E9

*Leadership Teacher Mean Differences of Gen X Principals*

| Item | Generational Cohort | | MD | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|
| 31. Our principal and other school administrators exhibit a deep understanding of curriculum, assessment, and instruction. | Gen X | Millennials | .18 | 2.67 | .07 |
| | Boomers | Millennials | .17 | | |
| | Boomers | Gen X | -.01 | | |
| 35. Our principal and other school administrators implement policies, practices, and procedures that ensure a safe and orderly learning environment. | Gen X | Millennials* | **.19** | 3.55 | **.03** |
| | Boomers | Millennials | .09 | | |
| | Boomers | Gen X | -.10 | | |
| 37. Our principal and other school administrators are visible to staff, students, and parents and participate in subject and/or grade level meetings. | Gen X | Millennials | .22 | 2.91 | **.06** |
| | Boomers | Millennials | .20 | | |
| | Boomers | Gen X | -.02 | | |
| 38. Our principal and other school administrators collaborate with staff members and other stakeholders to elicit input and provide opportunities for shared decision-making and problem-solving. | Gen X | Millennials* | **.23** | 3.63 | **.03** |
| | Boomers | Millennials | .17 | | |
| | Boomers | Gen X | -.06 | | |
| 39. Staff members have opportunities to serve in a variety of leadership roles. | Gen X | Millennials* | **.34** | 6.82 | **.001** |
| | Boomers | Millennials | .18 | | |
| | Boomers | Gen X | -.16 | | |

(Tables continues)

| | | | | | |
|---|---|---|---|---|---|
| 40. Our school receives help from Outside agencies like Metro RESA, colleges, businesses and the Ga. Dept. of Education. | Gen X | Millennials* | **.38** | 9.57 | **<.0001** |
| | Boomers | Millennials* | **.33** | | |
| | Boomers | Gen X | -.06 | | |
| 41. Our school has a fully operational Leadership Team that is Representative of our entire staff. The team conducts regular, results-driven meetings and exists to address student achievement and overall academic success. | Gen X | Millennials* | **.10** | 3.38 | **.03** |
| | Boomers | Millennials | .10 | | |
| | Boomers | Gen X | -.07 | | |
| 42. Our Leadership Team has a system for handling business, making decisions, and solving problems. | Gen X | Millennials* | **.19** | 3.20 | **.04** |
| | Boomers | Millennials | .13 | | |
| | Boomers | Gen X | -.06 | | |
| 44. Our Leadership Team uses current data to identify school performance needs. | Gen X | Millennials* | **.33** | 4.52 | **.01** |
| | Boomers | Millennials | .25 | | |
| | Boomers | Gen X | -.09 | | |

*Note.* MD = mean difference. * Statistically significantly lower mean score.

Table E10

*Planning and Organization Analysis of Variance of Teacher Perceptions of Gen X Principals*

| Item | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| 45. Our schools' vision and mission guides and informs our continuous school improvement process. | Cohorts | 1.21 | 2 | .61 | 1.39 | .25 |
| | Error | 257.23 | 590 | .44 | | |
| | Total | 258.44 | 592 | | | |
| 46. Our school improvement plan was created with staff input. | Cohorts | 3.23 | 2 | 1.61 | 3.15 | **.04** |
| | Error | 302.37 | 590 | .51 | | |
| | Total | 305.59 | 592 | | | |
| 47. Our administrators and the school leadership team monitor the implementation of the school improvement plan and its impact upon student achievement. | Cohorts | .66 | 2 | .33 | .74 | .48 |
| | Error | 261.26 | 590 | .44 | | |
| | Total | 261.92 | 592 | | | |
| 48. Our school goals are aligned with district goals. | Cohorts | 1.56 | 2 | .78 | 1.94 | .15 |
| | Error | 238.36 | 590 | .40 | | |
| | Total | 239.92 | 592 | | | |
| 49. Human, technological, and material resources are effectively selected and used to ensure the academic success of all learners. | Cohorts | 2.48 | 2 | 1.24 | 2.51 | .08 |
| | Error | 291.41 | 590 | .49 | | |
| | Total | 293.89 | 592 | | | |

(Table continues)

| | | | | | | |
|---|---|---|---|---|---|---|
| 50. A safe learning environment is planned, implemented, and maintained by our school staff and administrators. | Cohorts | 1.02 | 2 | .51 | 1.58 | .21 |
| | Error | 191.08 | 590 | .32 | | |
| | Total | 192.10 | 592 | | | |
| 51. Instructional time is maximized, and no interruptions occur to detract from time on learning. | Cohorts | 3.59 | 2 | 1.80 | 3.23 | **.04** |
| | Error | 327.73 | 590 | .56 | | |
| | Total | 331.32 | 592 | | | |
| 52. Our school facility is adequately maintained, clean, and conducive for teaching and learning. | Cohorts | 2.66 | 2 | 1.33 | 3.45 | **.03** |
| | Error | 227.28 | 590 | .39 | | |
| | Total | 229.94 | 592 | | | |

*Note.* MS = mean square.

Table E11

*Planning and Organization Teacher Mean Differences of Gen X Principals*

| Item | Generational Cohort | | MD | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|
| 46. Our school improvement plan was created with staff input. | Gen X | Millennials* | **.20** | 3.15 | **.04** |
| | Boomers | Millennials | .18 | | |
| | Boomers | Gen X | -.03 | | |
| 51. Instructional time is maximized, and no interruptions occur to detract from time on learning. | Gen X | Millennials* | **.21** | 3.23 | **.04** |
| | Boomers | Millennials | .20 | | |
| | Boomers | Gen X | -.03 | | |
| 52. Our school facility is adequately maintained, clean, and conducive for teaching and learning. | Gen X | Millennials* | **.19** | 3.45 | **.03** |
| | Boomers | Millennials | .11 | | |
| | Boomers | Gen X | -.08 | | |

*Note.* MD = mean difference. * Statistically significantly lower mean score.

Table E12

*Professional Learning Analysis of Variance of Teacher Perceptions of Gen X Principals*

| Item | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| 53. Teachers and administrators participate in job-embedded professional learning and collaboration addressing curriculum, assessment, instruction, and technology. | Cohorts | 6.05 | 2 | 3.02 | 4.63 | **.01** |
| | Error | 385.09 | 590 | .65 | | |
| | Total | 391.14 | 592 | | | |
| 54. The principal and other school leaders set clear expectations and monitor the effectiveness of professional learning on teacher practices and student learning. | Cohorts | 1.67 | 2 | .84 | 4.93 | .15 |
| | Error | 255.48 | 590 | .43 | | |
| | Total | 257.53 | 592 | | | |
| 55. Opportunities exist for teachers in our school to participate in instructional leadership development. | Cohorts | 1.27 | 2 | .64 | 1.34 | .26 |
| | Error | 279.07 | 590 | .47 | | |
| | Total | 280.34 | 592 | | | |
| 56. The principal and other leaders utilize data to plan for professional learning. | Cohorts | 2.05 | 2 | 1.03 | 2.15 | .12 |
| | Error | 281.90 | 590 | .48 | | |
| | Total | 283.95 | 592 | | | |
| 57. The professional learning activities at my school are connected to our school improvement goals. | Cohorts | 2.77 | 2 | 1.38 | 2.23 | .11 |
| | Error | 366.06 | 590 | .62 | | |
| | Total | 368.83 | 592 | | | |

(Table continues)

| | | | | | | |
|---|---|---|---|---|---|---|
| 58. Teams meet to review and study current research to make informed instructional decisions. | Cohorts | 5.32 | 2 | 2.66 | 4.72 | **.01** |
| | Error | 332.02 | 590 | .56 | | |
| | Total | 337.34 | 592 | | | |
| 59. The staff participates in long-term in-depth professional learning which is aligned with our school improvement goals. | Cohorts | 4.91 | 2 | 2.46 | 4.33 | **.01** |
| | Error | 335.15 | 590 | .57 | | |
| | Total | 340.06 | 592 | | | |
| 60. Teachers and administrators have the knowledge and skills necessary to collaborate. | Cohorts | .57 | 2 | .29 | 1.17 | .31 |
| | Error | 145.17 | 590 | .25 | | |
| | Total | 145.74 | 592 | | | |
| 61. Our professional learning prepares us in practices that convey respect for diverse cultural backgrounds and high expectations for all students. | Cohorts | 3.56 | 2 | 1.78 | 3.62 | **.03** |
| | Error | 289.83 | 590 | .49 | | |
| | Total | 293.39 | 592 | | | |
| 62. Our professional learning prepares teachers to adjust instruction and assessment to meet the needs of diverse learners. | Cohorts | 8.52 | 2 | 4.26 | 6.65 | **.001** |
| | Error | 377.81 | 590 | .64 | | |
| | Total | 386.33 | 592 | | | |
| 63. Our teachers participate in professional learning to deepen their content knowledge. | Cohorts | 1.30 | 2 | .65 | 2.02 | .13 |
| | Error | 189.75 | 590 | .32 | | |
| | Total | 191.05 | 592 | | | |

(Table continues)

| | | | | | | |
|---|---|---|---|---|---|---|
| 64. Our professional learning designs are purposeful and are aligned with specific individual group needs. | Cohorts | 2.86 | 2 | 1.43 | 2.64 | .07 |
| | Error | 320.15 | 590 | .54 | | |
| | Total | 323.01 | 592 | | | |
| 65. Professional learning in our school provides opportunities for teachers and administrators to learn how to involve families in their children's education. | Cohorts | .66 | 2 | .33 | .98 | .38 |
| | Error | 199.09 | 590 | .34 | | |
| | Total | 199.75 | 592 | | | |

*Note.* MS = mean square.

Table E13

*Professional Learning Teacher Mean Differences of Gen X Principals*

| Item | Generational Cohort | | MD | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|
| 53. Teachers and administrators participate in job-embedded professional learning and collaboration addressing curriculum, assessment, instruction, and technology. | Gen X | Millennials* | **.27** | 4.63 | **.01** |
| | Boomers | Millennials* | **.26** | | |
| | Boomers | Gen X | -.02 | | |
| 58. Teams meet to review and study current research to make informed instructional decisions. | Gen X | Millennials* | **.26** | 4.72 | **.01** |
| | Boomers | Millennials | .14 | | |
| | Boomers | Gen X | -.12 | | |

(Table continues)

| | | | | | |
|---|---|---|---|---|---|
| 59. The staff participates in long-term in-depth professional learning which is aligned with our school improvement goals. | Gen X | Millennials* | **.24** | 4.33 | **.01** |
| | Boomers | Millennials | .12 | | |
| | Boomers | Gen X | -.13 | | |
| 61. Our professional learning prepares us in practices that convey respect for diverse cultural backgrounds and high expectations for all students. | Gen X | Millennials* | **.22** | 3.62 | **.03** |
| | Boomers | Millennials | .13 | | |
| | Boomers | Gen X | -.09 | | |
| 62. Our professional learning prepares teachers to adjust instruction and assessment to meet the needs of diverse learners. | Gen X | Millennials* | **.33** | 6.65 | **.001** |
| | Boomers | Millennials | .20 | | |
| | Boomers | Gen X | -.13 | | |
| 64. Our professional learning designs are purposeful and are aligned with specific individual group needs. | Gen X | Millennials | .20 | 2.64 | **.07** |
| | Boomers | Millennials | .15 | | |
| | Boomers | Gen X | -.05 | | |

*Note.* MD = mean difference. * Statistically significantly lower mean score.

Table E14

*School Culture Analysis of Variance of Teacher Perceptions of Gen X Principals*

| Item | Factor | Sum of Squares | *df* | MS | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|---|
| 71. Our school provides support to promote the academic achievement of all learners, | Cohorts | 1.74 | 2 | .87 | 1.64 | .19 |
| | Error | 214.14 | 590 | .53 | | |
| | Total | 315.88 | 592 | | | |
| 72. Our school supports and enhances the social and emotional growth and development of all learners. | Cohorts | 1.17 | 2 | .58 | 1.76 | .17 |
| | Error | 195.89 | 590 | .33 | | |
| | Total | 197.06 | 592 | | | |
| 73. School policies, practices, and experiences promote respect for individual differences. | Cohorts | 6.75 | 2 | 3.38 | 7.91 | .0004 |
| | Error | 251.70 | 590 | .43 | | |
| | Total | 258.45 | 592 | | | |
| 74. Our school celebrates the achievement and accomplishments of our students, staff, and school community. | Cohorts | 1.27 | 2 | .64 | 1.94 | .14 |
| | Error | 192.97 | 590 | .33 | | |
| | Total | 194.24 | 592 | | | |
| 75. Our school culture reflects an atmosphere of trust and openness among all stakeholders. | Cohorts | 1.68 | 2 | .84 | 1.88 | .16 |
| | Error | 265.64 | 590 | .45 | | |
| | Total | 267.32 | 592 | | | |

*Note.* MS = mean square.

Table E15

*School Culture Teacher Mean Differences of Gen X Principals*

| Item | Generational Cohort | | MD | *F* | *p*-value $p \leq$ |
|---|---|---|---|---|---|
| 73. School policies, practices, and experiences promote respect for individual differences. | Gen X | Millennials* | **.30** | 7.91 | **.0004** |
| | Boomers | Millennials* | **.20** | | |
| | Gen X | Boomers* | **.10** | | |

*Note.* MD = mean difference. * Statistically significantly lower mean score.